### DOCUMENT RESUME

VT 010 829 ED 037 584

Abstracts of Instructional Materials in Vocational TITLE

and Technical Education (AIM), Winter 1969. Ohio State Univ., Columbus. Center for Vocational INSTITUTION

and Technical Education.

Office of Education (DHEW), Washington, D.C. SPONS AGENCY

70 PUB DATE NOTE 168p.

ERIC Clearinghouse for Vocational and Technical AVAILABLE FROM

Education, The Ohio State University, 1900 Kenny Road, Columbus, Ohio 43210 (Quarterly--Fall, Winter,

Spring, Summer, \$9.00 per year)

EDRS Price MF-\$0.75 HC-\$8.50 EDRS PRICE

Agricultural Education, \*Annotated Bibliographies, DESCRIPTORS Business Education, Clearinghouses, Distributive Education, Health Occupations Education, Home

Economics Education, Indexes (Locaters), Industrial

Arts, \*Instructional Materials, \*Technical

Education, Trade and Industrial Education, \*Vocational Education

ABSTRACT

ERIC

This quarterly publication announces the availability of instructional materials acquired and processed by the Educational Resources Information Center (ERIC) Clearinghouse on Vocational and Technical Education. It should be of particular interest to teachers, curriculum specialists, supervisors, and administrators involved in curriculum development or the use of instructional materials in the teaching-learning setting. Each abstract, a condensation of the report in about 200 words, usually includes the means used to develop the material, the setting for use of the material, and source of available copies. Abstracts are included under the following sections: Agricultural, Business and Office, Distributive, Health Occupations, Home Economics, Industrial Arts, Technical, Trade and Industrial, and General Vocational and Technical Education. An author index, document number index, and subject indexes are provided. Most of the documents which have not been announced in "Research in Education," are available as a separate microfiche set from the ERIC Documents Reproduction Service (VT 010 834). Others are available from the source identified in the abstract. (CD)

# ABSTRACTS OF INSTRUCTIONAL MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION

**WINTER 1969** 

ERIC CLEARINGHOUSE
THE CENTER FOR VOCATIONAL
AND TECHNICAL EDUCATION
THE OHIO STATE UNIVERSITY
COLUMBUS, OHIO

VT010829

The Center for Vocational and Technical Education has been established as an independent unit on The Ohio State University campus with a grant from the Division of Comprehensive and Vocational Education Research, U. S. Office of Education. It serves a catalytic role in establishing consortia to focus on relevant problems in vocational and technical education. The Center is comprehensive in its commitment and responsibility, multidisciplinary in its approach, and interinstitutional in its program.

The major objectives of The Center follow:

- 1. To provide continuing reappraisal of the role and function of vocational and technical education in our democratic society;
- 2. To stimulate and strengthen state, regional, and national programs of applied research and development directed toward the solution of pressing problems in vocational and technical education;
- 3. To encourage the development of research to improve vocational and technical education in institutions of higher education and other appropriate settings;
- 4. To conduct research studies directed toward the development of new knowledge and new applications of existing knowledge in vocational and technical education;
- 5. To upgrade vocational education leadership (state supervisors, teacher educators, research specialists, and others) through an advanced study and inservice education program;
- 6. TO PROVIDE A NATIONAL INFORMATION RETRIEVAL, STORAGE, AND DISSEMINATION SYSTEM FOR VOCATIONAL AND TECHNICAL EDUCATION LINKED WITH THE EDUCATIONAL RESOURCES INFORMATION CENTER LOCATED IN THE U.S. OFFICE OF EDUCATION.



### Abstracts of

## Instructional Materials

ĭn

# Vocational and Technical Education WINTER 1969

The Center gratefully acknowledges a contribution from The Sears-Roebuck Foundation to publish this quarterly abstract series.

Preparation of the material in this publication was performed by the ERIC Clearinghouse on Vocational and Technical Education pursuant to a contract with the U.S. Office of Education, Department of Health, Education & Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official Office of Education position or policy.

ERIC Clearinghouse on Vocational and Technical Education
The Center for Vocational and Technical Education
The Ohio State University
1900 Kenny Road, Columbus, Ohio 43210

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.



# ERIC CLEARINGHOUSE ON VOCATIONAL AND TECHNICAL EDUCATION

Director			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	Robert E. Taylor
Coordinator			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	4	•	Celianna I. Taylor
Information	Speci	ali	st	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	Roy E. Butler
Information	Speci	ali	st	•	•	•	•	•	•	•	•	•	•	•	•	•	•	¢	•	•	•	•	Joel H. Magisos
Acting Abst:	ractir	ng-I	nde	ix	ine	<b>z</b> ]	Ed:	ito	or	•	•	•	•	•	٠	•	•	•	•	•	•	•	Mary Ury
Information	Techi	nici	an	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	Chotard Doll
Information	Techi	nici	an	•	•	•	•	•	•		•	•	•	•	•	•	0	•	•	•	•	•	Donna Minick
Information	Tech	nici	an.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	Doris Smith
Information	Tech	nici	an.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	Ann Whitlatch
Document An																							

Elizabeth Caldwell

Charles M. Harris

Jean K. Kintgen

David McCracken

George W. Reeser

Abstracts of Instructional Materials in Vocational and Technical Education is a quarterly publication (Fall, Winter, Spring, Summer) published by the ERIC Clearinghouse on Vocational and Technical Education. Subscription is \$9.00 per year. Send order to ERIC Clearinghouse, The Center for Vocational and Technical Education, The Ohio State University, 1900 Kenny Road, Columbus, Ohio 43210. Contents of this publication may be reprinted freely without requesting permission, providing appropriate credit is given to the Clearinghouse.



### PREFACE

Abstracts of Instructional Materials in Vocational and Technical Education (AIM) and the companion publication Abstracts of Research and Related Materials in Vocational and Technical Education (ARM) announce the availability of documents acquired and processed by the ERIC Clearinghouse on Vocational and Technical Education. AIM includes abstracts of materials typically designed for teacher use or student use in the classroom, and annotations of bibliographies or lists of instructional materials. It will be of particular interest to teachers, curriculum specialists, supervisors and administrators involved in the use of instructional materials in the teaching-learning setting, or in curriculum development. ARM incorporates abstracts of research and other materials which are useful to a wide audience of users such as researchers, supervisors, teacher educators, education specialists, administrators, teachers and others who have an interest in vocational and technical education. These publications prepared by the ERIC Clearinghouse on Vocational and Technical Education are published quarterly beginning with the Fall 1967 issue.

The ERIC Clearinghouse on Vocational and Technical Education is a division of the Center for Research and Leadership Development in Vocational and Technical Education located at The Chio State University and is one of the clearinghouses of the Educational Resources Information Center (ERIC-USOE). With the growth of vocational and technical education programs, there is an increasing need for accessible information that can be used in developing logical chains of reasoning for research activities, for improving school practices and for shortening the theory-practice gap. This Clearinghouse is striving to provide a useful and vital function in dissemination of information on vocational and technical education. ARM and AIM give visibility to a document-based information system which constitutes an on-going data bank of research and resource materials in vocational and technical education. Following are some of the benefits derived from this data base:

- \* A central source of information to be reviewed and synthesized into state-ofthe-art papers, critical reviews, interpretive papers, etc.
- \* A resource which includes different kinds of materials, e.g., instructional materials, descriptive reports, survey reports, dissertations, conference proceedings, program plans or procedures, research reports.
- \* Provision for availability of primary source materials through the ERIC Document Reproduction Service (EDRS) and/or other distribution agencies.
- \* A source of bibliographies and a resource for development of bibliographies.
- \* A source of materials for different user groups (i.e., administrators, supervisors, teacher educators, teachers, legislative and advisory bodies) with information needs in such diverse areas as teaching and learning, manpower needs and requirements, research design and methodology, evaluation.

Since this Clearinghouse is a component of a larger information system, ERIC, it is logical that certain similarities among publications exist. In this regard the format of ARM and AIM is similar to that of Research in Education (RIE)<sup>1</sup>, the primary publication of the Educational Resources Information Center (ERIC). RIE



Research in Education is published 12 times a year. The first issue was no. 1, November 1966. Subscription: Domestic \$21.00 a year; foreign \$5.25 additional. Single copy: Domestic, \$1.75. Send check or money order (no stamps) to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

includes abstracts from all ERIC Clearinghouses. The abstracts of materials reported in AIM relate specifically to the educational field of vocational and technical education and constitute a segment of ERIC, the national information system for American education.

In addition to the two quarterly publications, Abstracts of Research and Related Materials in Vocational and Technical Education (ARM), and Abstracts of Instructional Materials in Vocational and Technical Education (AIM), other publications will be issued from time to time. These will typically concern themselves with reviewing and synthesizing information in specific areas of vocational and technical education, e.g., Review and Synthesis of Research in Technical Education; Agricultural Education; Home Economics, etc., and with reviewing and synthesizing information related to topical areas such as the economics of vocational and technical education.

We are indebted to our colleagues within the profession for their cooperation in forwarding materials to the clearinghouse and for their suggestions and comments which have materially assisted in the development of this program. We anticipate further refinement and improved procedures with the continued assistance of our advisory committee.

Robert E. Taylor Director



### INTRODUCTION

# Organization of ABSTRACTS OF INSTRUCTIONAL MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION

Abstracts of Instructional Materials in Vocational and Technical Education relies upon two basic formats--resumes and indexes--to serve the browser and those seeking specific information. The resumes are organized according to vocational service groupings in the first section of the document. Under each grouping, the resumes are arranged by Vocational Technical (VT) number which is an identification number assigned to reports as they are processed. Resumes contain an abstract which indicates the contents of a document in two hundred words or less. Additional components of a resume are explained in a diagram on page ix immediately preceding the resume section.

Several indexes are located after the resume section to provide specific approaches to documents reported in the resume section. These indexes are:

Subject and Identifier Index
Personal and Institutional Author Index
Document Number Index
Conversion of Document Number (VT to ED or MP, ED or MP to VT)

All of the indexes refer to page numbers in this publication to enable the reader to quickly locate any resume of interest.

# Availability of AIM

AIM is published quarterly (Fall, Winter, Spring, Summer). The first issue began Fall 1967. At this time the four issues for the period Fall 1967 - Summer 1968 and the AIM-ARM Annual Indexes are available only on microfiche or facsimile copy. Annual subscriptions are available beginning with Fall 1968. Microfiche or facsimile copy for all previous issues may be ordered from ERIC Document Reproduction Service, The National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014. Please write to EDRS for order forms.

ED 013 337	Fall 1967 AIM	MF - \$ .75	or	HC - \$ 9.35
ED 015 336	Winter 1967 AIM	MF - \$1.00	or	HC - \$10.50
ED 017 745	Spring 1968 AIM	MF - \$.75	or	HC - \$ 9.95
ED 020 441	Summer 1968 AIM	MF - \$.75	or	HC - \$ 8.95
ED 022 064	AIM-ARM Annual	MF - \$.50	or	HC - \$ 6.30
	Index 1967-68			•
ED 023 936	Fall 1968 AIM	MF - \$.75	or	HC - \$ 9.30
ED 028 302	Winter 1968 AIM	MF - \$.75	or	HC - \$8.45
ED 030 769	Spring 1969 AIM	MF - \$.75	or	HC - \$8.70
ED 032 433	Summer 1969 AIM	MF - \$.75	or	HC - \$ 8.30
ED 034 075	Fall 1969 AIM	MF - \$.75	or	HC - \$ 8.90
ED (See Jun. '70 RIE)	AIM-ARM Annual	•		, ,
•	Index 1968-69			

Subscriptions for hard copy may be initiated with the Fall 1968 issue, or subsequent issues. Send order indicating quarter and year that subscription is to begin to:

AIM-ARM
ERIC Clearinghouse
The Center for Vocational and Technical Education
1900 Kenny Road
Columbus, Ohio 43210



### Availability of Materials Reported in AIM

A basic concept of the ERIC system is to make known the availability of the full text of materials abstracted. Most of the materials processed into the ERIC system with an ERIC Document (ED) number vall be available from the ERIC Document Reproduction Service (EDRS) in the form of microfiche or facsimile copy. There is an EDRS availability line with each abstract which indicates if a document may be obtained from EDRS. Microfiche or facsimile copy must be ordered by ED (ERIC Document) number since EDRS is not set up to respond to requests for materials by subject, author, or title. If a document is not available from EDRS, the agency and address from which the document may be obtained is in the resume. AIM and ARM indexes can be used to determine ED numbers which relate to problem areas. Always check the most current issue of RIE in the section, How to Order ERIC Document Reproductions for the latest price schedules and ordering procedure for microfiche (MF) and facsimile copy, called hard copy (HC).

Materials with ED numbers are announced in Research in Education (RIE) as well as AIM or ARM. These are available as individual documents through EDRS or another source. Documents with VT numbers only are not announced in RIE but are included in AIM and ARM. They are not available as individual documents from EDRS but as part of a VT-ERIC set. Microfiche for an individual document in one of these sets is obtainable only through purchase of the set or from agencies that have this set and have the capability of reproducing microfiche. Reports in these sets are identified in the resume by the phrase MF AVAILABLE IN VT-ERIC SET. The documents are grouped in VT number sequence in the microfiche set for each issue of AIM or ARM. Each set is announced in RIE under a single (ED) number. The Fall 1967 - Summer 1968 Microfiche Collections contain documents with VT numbers only and ED documents. Beginning with Fall 1968, the microfiche set contains the documents which have only VT numbers. Thus the microfiche collection for a particular issue of ARM now contains the items in that issue of AIM which have the statement, MF AVAILABLE IN VT-ERIC SET, in the resume. These sets may be ordered from EDRS. Information to be used in ordering the sets for AIM follows:

### AIM Microfiche Collections

AIM	ED Number	Microfiche
Fall 1967	ED 013 339	\$22.25
Winter 1967	ED 015 349	\$40.25
Spring 1968	ED 017 746	\$54.00
Summer 1968	ED 020 442	<b>\$53.00</b>
Fall 1968	ED 022 971	\$38.50
Winter 1968	ED 028 305	\$41.00
Spring 1969	ED 030 770	<b>\$58.00</b>
Summer 1969	ED 032 434	\$86.00
Fall 1969	ED 034 074	\$70.00

It should be noted that organizations which have standing orders with EDRS for the total microfiche collections in RIE will automatically receive the ARM and AIM microfiche collections. If an organization wishes to order only the materials abstracted by VT-ERIC which are announced in RIE and are on microfiche, a standing order may be initiated with EDRS for a VT-ERIC package. This package will automatically include the ARM and AIM microfiche collections. Contact EDRS for information about cost of current or retrospective VT-ERIC packages.



# Availability Key for Materials Reported in AIM

Accession Number	Availability on Microfiche
ED number supplied	ERIC Document Reproduction Service (EDRS) provided that the information is shown on EDRS price line.
ED appears with reference to an RIE issue (e.g., ED (See Aug. '69 RIE)	If a price is given for microfiche, the fiche is unavailable from EDRS (at time of printing) until an ED number is assigned and published in RIE. The issue of RIE in which the abstract is scheduled to appear follows the ED prefix. After assignment of numbers has been made by Central ERIC, the Conversion of Document Number Index in each succeeding issue of AIM will include numbers for documents listed with an ED and RIE date in the previous issue.
VT number only supplied	Available on microfiche in VT-ERIC set from EDRS as indicated.

# ERIC Document Reproduction Service (EDRS)

The ERIC Document Reproduction Service (EDRS) is operated by The National Cash Register Company. Request order forms from:

EDRS
The National Cash Register Company
4936 Fairmont Avenue
Bethesda, Maryland 20014

Prices for microfiche and/or hard copy undergo occasional changes which become effective when announced in Research in Education. EDRS prices cited in AIM and ARM reflect the prices in effect at the time of publication. Retrospective use of AIM and ARM requires attention to the most recent price schedules and ordering information which is available in a current issue of RIE.

# Scope of the Clearinghouse

The Clearinghouse on Vocational and Technical Education is responsible for acquiring, processing, and disseminating through the ERIC system, research reports, instructional materials, information analysis products and other resource materials related to vocational and technical education. In addition to this general area, coverage includes the specific occupational fields of agricultural education, business and office occupations education, distributive education, health occupations education, home economics education, technical education, trade and industrial education, and new sub-professional fields. The clearinghouse scope also encompasses the related fields of industrial arts education, manpower economics, occupational



psychology, and occupational sociology. The following subject categories when specifically oriented to vocational-technical education and its related fields are included in the scope of the clearinghouse: administration and supervision, curriculum, employment and occupations, evaluation and measurements, facilities and equipment, historical studies, individuals with special needs, instructional materials and devices, philosophy and objectives, research design and development, occupational guidance and other student personnel services, students, teachers, teacher education, teaching and learning.

# Acquisitions

The adequacy of information in this publication, as well as other services of this clearinghouse, is directly related to the extensiveness of the information acquired and processed into the system. This Clearinghouse has assumed the initiative in obtaining as much of the available information as possible. However, it is impossible for any organization to achieve complete and comprehensive coverage of a field as vast as vocational education without the cooperation and assistance of the profession. The growth and ultimate effectiveness of the system require supplemental efforts of its users. Any person in the vocational or technical field is invited to forward to the Clearinghouse two copies of items relating to vocational-technical education for possible inclusion in the system. Questions relating to this endeavor should be directed to the Acquisitions Specialist at the Clearinghouse.

# Abbreviations

AIM Abstracts of Instructional Materials in Vocational and Technical Education

ARM Abstracts of Research and Related Materials in Vocational and Technical

Education

ED ERIC Document

EDRS ERIC Document Reproduction Service

ERIC Educational Resources Information Center

HC Hard copy

MF Microfiche

RIE Research in Education

VT Vocational-Technical

### SMPLE RESUME

Accession Number-an identification number sequentially assigned to reports as they are processed

Author(s) -- the individual(s) who prepared the report.

EDRS Price--price of the document through the ERIC Document Reproduction Service. "MF" means microfiche; "HC" means hardcopy.

Report Number

If item cited appeared originally in a journal, a journal citation would appear here.

Publication Date

Total number of printed pages in the report, including cover and appendices.

Identifier, if anyacronyms, geographical areas, conferences, organizations, tests (e.g. Binet), etc. Only the major identifiers preceded by an asterisk are printed in the index.

Abstract--a condensation of the report in about 200 words. When applicable, it includes the purpose, means of development, subject-matter content, teacher competency, student requirements, and description of supplementary materials if available.

VT 002 079 ED 017 657

Karnes, James B.

Medical Record Technology, A Course of Study Designed for Cooperative Part-Time Students Employed in Medical Record Libraries.

Missouri State Dept. of Education, Jefferson City. Industrial Education Section
Missouri Univ., Columbia. Dept. of Industrial Education

EDRS PRICE MF-\$0.75 HC NOT AVAILABLE FROM EDRS.

Industrial Education, 103 Industrial Education Building, University of Missouri, Columbia, Missouri 65201 (\$1,50).

Pub Date - Aug64\_ 136p.

\*STUDY GUIDES; \*HEALTH OCCUPATIONS EDUCATION; GRADE 11; POST SECONDARY EDUCATION; ASSIGNMENTS; \*COOPERATIVE EDUCATION; STUDENT RECORDS; \*MEDICAL RECORD TECHNICIANS

Designed for use by eleventh grade cooperative part-time students employed in medical record libraries, this guide may also be used in area vocational or post-high school settings. It was developed by a consultant committee, teacher educators, and research assistants at the state level and revised after use in the field.........An analysis of medical record technology and progress records to be completed by the employer, teacher, and student are included. The material should be used with related instruction for individual students by a qualified coordinator or competent health occupations teacher. (JK)

If ED is followed by numbers, item has been announced in Research in Education. If ED is not followed by numbers, the issue of RIE in which the abstract is scheduled to appear follows the ED prefix.

Title of report.

Institutional sourcethe organization responsible for the report.

Sponsoring Agency-would appear here if different than Institutional Source.

Grant Number and Program Area Number would also appear on this line.

Commercial, institutional, and other sources of availability if known at time of printing. Cost is included.

Descriptors--the subject terms assigned by an indexer to characterize the contents of a report. Only the major terms, those preceded by an asterisk, are printed in the index.

Abstractor's Initials.

# Availability Key for Materials Reported in AIM

Accession Number:	Availability on Microfiche
ED number supplied	ERIC Document Reproduction Service (EDRS) provided the information is shown on EDRS price line.
ED appears with reference to an RIE issue (See Nov. '69 RIE)	If a price is given for microfiche, the fiche is unavailable from EDRS (at time of printing) until an ED number is assigned and published in RIE. The issue of RIE in which the abstract is scheduled to appear follows the ED prefix. After assignment of numbers has been made by Central ERIC, the Conversion of Document Number Index in each succeeding issue of AIM will include numbers for documents listed with an ED and RIE date in the previous issue.
VT number only supplied	Available on microfiche in VT-ERIC set from EDRS as indicated.



# TABLE OF CONTENTS

Page
FREFACE
INTRODUCTION
ABSTRACTS
Agricultural Education Section
Business and Office Education Section
Distributive Education Section
Health Occupations Education Section
Home Economics Education Section
Industrial Arts Education Section 20
Technical Education Section
Trade and Industrial Education Section
General Vocational and Technical Education Section 23
INDEXES
Subject and Identifier Index
Personal and Institutional Author Index
Document Number Index
Conversion of Document Number Index
SOURCE LIST



AGRICULTURAL EDUCATION SECTION



VT 002 215 Ornamental Horticulture Teaching Materials (Title Supplied).

North Carolina State Dept. of Public Instruction, Raleigh. Agricultural Education Section MF AVAILABLE IN VT-ERIC SET. Pub Date - 67 50p.

\*TRANSPARENCIES; \*INSTRUCTIONAL AIDS; \*VOCATIONAL AGRICULTURE; \*ORNAMENTAL HORTICULTURE; \*ORNAME

Developed by a teaching materials supervisor, these instructional aids are for use by teachers and students as part of an occupational cluster in ornamental horticulture in the eastern United States. The document contains 48 transparency masters which may be integrated with several units of instruction at the high school or post-high school level. Some subject content includes: (1) a general overview of horticulture, (2) horticultural career opportunities, (3) definitions of horticultural terms, (4) horticultural practices, (5) growing regions, (6) characteristics of various plants, (7) plant parts and development, (8) plant propagation, (9) how to identify plants, and (10) landscaping. Teachers with a knowledge of ornamental horticulture may use this document in conjunction with VT 002 693 (teacher's manual) and VT 004 033 (1-year course guide), both in this issue. (DM)

VT 002 693 Teacher's Manual on How to Use Ornamental Horticulture Teaching Materials.

North Carolina State Dept. of Public Instruction, Raleigh. Agricultural Education Section MF AVAILABLE IN VT-ERIC SET. Pub Date - Sep67 42p.

\*TEACHING GUIDES; \*VOCATIONAL AGRICULTURE; \*INSTRUCTIONAL MATERIALS; \*ORNAMENTAL HORTICULTURE; \*ORNAMENTAL HORTICULTURE OCCUPATION; SECONDARY GRADES; POST SECONDARY GRADES

Developed by an instructional materials supervisor, this teaching guide is for use with high school or post-high school students studying an occupational cluster in ornamental horticulture. Suggestions are provided for teaching the material contained in transparency masters available as VT 002 215 (in this issue), a color filmstrip entitled "The Identification of Ornamental Plants," and a sound tape. The content includes: (1) introduction, (2) description of the filmstrip, (3) sound tape description, (4) transparency master description, (5) script to use with the filmstrip, (6) printing instruction for masters, and (7) suggested student activities. Teachers should have a knowledge of ornamental horticulture. A suggested 1-year course guide is available as VT 004 033 (in this issue). (DM)

VT 002 937
Wolf, Willard H., Ed.
Agricultural Business and Services for High School Students of Vocational Agriculture. Report of the Workshop: Program Planning, Agricultural Education 799B. (Ohio State University, June 15-29, 1967).

Ohio State Univ., Columbus. Dept. of Agricultural Education
Ohio State Dept. of Education, Columbus. Agricultural Education Service
MF AVAILABLE IN VT-ERIC SET.
Ohio Vocational Agriculture, Instructional Materials Service, The Ohio State University, 2120 Fyffe Road,
Columbus, Ohio 43210 (\$1.00).
Pub Date - 67 114p.

\*VOCATIONAL AGRICULTURE; \*OFF FARM AGRICULTURAL OCCUPATIONS; SECONDARY GRADES; \*COOPERATIVE EDUCATION; \*PROGRAM GUIDES; \*WORKSHOPS; PROGRAM PLANNING; OCCUPATIONAL SURVEYS; ADVISORY COMMITTEES; PUBLIC RELATIONS; PROGRAM ADMINISTRATION; STUDENT EVALUATION; ADMISSION CRITERIA; EMPLOYERS; PHYSICAL FACILITIES

A plan of operation and procedure was developed by 27 prospective teacher-coordinators, in cooperation with state supervisors and teacher educators, for implementing cooperative occupational experience programs to prepare students for employment in agricultural business and service occupations. Committees of workshop participants developed sections of the report on: (1) agricultural business and service programs, (2) public relations, (3) advisory councils, (4) program guidelines, (5) criteria for Ohio programs, (6) teachers, qualifications, (7) facilities and equipment, (8) community employment needs, (9) selection of students, (10) selection of training centers and cooperators, (11) training agreements, (12) Federal and Ohio wage laws, (13) guidelines and curriculum for related classes, (14) individualized student instruction and study, (15) on-the-job instruction, (16) records and reports, (17) the Future Farmers of America in the agri-business on-the-job instruction, and (19) professional improvement. Necessary forms for implementing a program program, (18) an evaluation, and (19) professional improvement. Necessary forms for implementing a program are included. A report of the previous year's workshop is available as VT 001 949 (ARM, Fall 1969). (DM)

VT 004 033 Ornamental Horticulture, A Guide for Providing Instruction for 11th and 12th Grade Vocational Education in Agriculture.

North Carolina State Board of Education, Raleigh. Dept. of Community Colleges
North Carolina State Dept. of Public Instruction, Raleigh. Div. of Vocational Education
North Carolina State Univ., Raleigh. Dept. of Agricultural Education
MF AVAILABLE IN VT-ERIC SET.
Pub Date - Jul64 41p.

\*VOCATIONAL AGRICULTURE; \*ORNAMENTAL HORTICULTURE; \*CURRICULUM GUIDES; \*ORNAMENTAL HORTICULTURE OCCUPATION; GRADE 11; GRADE 12; EDUCATIONAL FACILITIES; SUPERVISED FARM PRACTICE; OCCUPATIONAL INFORMATION; FLORICULTURE; LANDSCAPING; NURSERIES (HORTICULTURE)

Designed for use by high school teachers providing instruction for junior and senior vocational agriculture students, this document presents a suggested 1-year course guide for ornamental horticulture. Major units of study are: (1) Introduction, Orientation, and Vocational Guidance, (2) Nursery Practice, (3) Floriculture, and (4) Landscape Gardening. The course is structured in breadth and depth to help students prepare for entry or to pursue further training in ornamental horticulture occupations. Employment opportunities and requirements are explored in the first unit and expanded in the three following segments. Many of the teaching-learning activities could be taught in the form of ornamental horticulture projects through the Future Farmers of America organization for community beautification and public relations. The appendixes list basic facilities and equipment, suggested references, and some suggestions for supervised practice programs. Transparency masters and a teaching guide for use with this course are announced as VT 002 215 and VT 002 693 (both in this issue). (WB)



VT 007 338
Thompson, John F.
Handbook for the Interns in Agricultural Education, 1968.

Wisconsin Univ., Madison. Dept. of Agricultural and Extension Education MF AVAILABLE IN VT-ERIC SET. Pub Date - 68 20p.

STUDENT TEACHERS; \*STUDENT TEACHING; \*CONCEPTUAL SCHEMES; \*MANUALS; \*VOCATIONAL AGRICULTURE; TEACHER EDUCATION; \*TEACHER INTERNS; COOPERATING TEACHERS; PRESERVICE EDUCATION

To establish a conceptual framework for the intern program in agricultural education, this document discusses issues to guide the intern and team coordinator in the development of educational experiences for the student teacher. The content includes: (1) The Intern Setting, (2) Profession Defined, (3) What Is an Internship, (4) How Does the Internship Function, (5) Your Crucial Task, (6) Levels of Experience, (7) The Learning Process, (8) A Model for Educational Decision Making, (9) Individualized Instruction in Vocational Agriculture, and (10) Expected Outcomes of the Internship. The appendixes contain a list of reference materials, and the required seminars and assignments. (DM)

VT 007 699 ED 027 400 A Description and Source Listing of Professional Information in Agricultural Education, 1964-65, 1965-66.

American Vocational Association, Washington, D.C. Agricultural Div. EDRS PRICE MF-\$ 0.25 HC-\$2.40 Pub Date - 66 46p.

\*ANNOTATED BIBLIOGRAPHIES; \*AGRICULTURAL EDUCATION; ADULT FARMER EDUCATION; POST SECONDARY EDUCATION; AGRICULTURAL ENGINEERING; ANIMAL SCIENCE; CURRICULUM DEVELOPMENT; EDUCATIONAL FACILITIES; FARM MANAGEMENT; FORESTRY; SCHOOL ORGANIZATIONS; OCCUPATIONAL GUIDANCE; AGRONOMY; SUPERVISION; SUPERVISED FARM PRACTICE; TEACHER EDUCATION; \*INSTRUCTIONAL MATERIALS; \*INFORMATION SOURCES

This bibliography, containing professional information in agricultural education published in the school years 1964-65 and 1965-66, was prepared by the Professional Information Committee of the Agricultural Division of the American Vocational Association, Respectively, they contain 141 and 170 listings with short annotations including availability and price, and are organized under headings of: (1) Adult and Post High School Education, (2) Agricultural Mechanics, (3) Animal Science, (4) Curriculum Development, (5) Facilities for Department, (6) Farm Business, Management, Marketing, (7) Forestry, (8) Future Farmers of America, (9) Guidance and Occupational Opportunities, (10) Plant Science and Soils, (11) Supervision and Teacher Education, (12) Supervised Practice, and (13) Teaching Aids and Materials. Similar bibliographies for the years 1967-68, 1968-69 are available as VT 007 903 (ARM, Fall 1969). (DM)

VT 007 848
Rannells, Robert
Hydraulic Systems for the Farm. Resource Unit and Skill Text.

Minnesota Univ., St. Paul. Inst. of Agriculture DOCUMENT NOT AVAILABLE FROM EDRS. Bulletin Room, AEAE, University of Minnesota, St. Paul, Minnesota (\$2.00). Pub Date - nd 45p.

\*VOCATIONAL AGRICULTURE; \*AGRICULTURAL ENGINEERING; \*TEACHING GUIDES; \*HYORAULICS; \*FARM MECHANICS (OCCUPATION); SECONDARY GRADES; ACHIEVEMENT TESTS; AGRICULTURAL PRODUCTION; FARMERS; FLUID POWER EDUCATION; KINETICS; AGRICULTURAL MACHINERY

Developed by graduate students in agricultural education, this teaching guide is for use in high school classes of vocational agriculture in agricultural mechanics instruction. It may be appropriately used at either the high school or post-high school instructional level. Each of the five major lessons contains: (1) Introduction, (2) Objectives, (3) Subject Content, (4) Suggested Activities, and (5) References, which are keyed to four reference books. Lessons include: (1) Introduction to Hydraulic Systems, (2) Pumps and Cylinders, (3) Controls, Valves, Reservoirs and Accumulators, (4) Filters, Lines, Connectors, Seals, and Fluids, and (5) Maintenance and Trouble Shooting. A skill test is available to measure student learning. Teachers should have a bachelor's degree and mechanical aptitude and interests. (DM)

VT DO8 042
Basic Curriculum for Vocational Agriculture in Texas. Production Agriculture. Preliminary Draft.

Texas Education Agency, Austin MF AVAILABLE IN VT-ERIC SET. Pub Date - 68 16p.

\*CURRICULUM GUIDES; \*VOCATIONAL AGRICULTURE; \*AGRICULTURAL PRODUCTION; \*FARMERS; SECONDARY GRADES; ANIMAL SCIENCE; AGRONOMY; SUPERVISED FARM PRACTICE; AGRICULTURAL ENGINEERING; FARM MANAGEMENT TEXAS

Developed by a committee comprised of representatives from the various professional areas of the vocational agriculture program, this curriculum guide is designed primarily for use in planning and implementing an updated, 4-year, 700-hour vocational agriculture program in the Texas secondary schools. The content consists of course outlines for Vocational Agriculture I, II, III, and IV, with each course including the subject matter areas of: (1) Introduction, (2) Animal Science, (3) Soil Science, (4) Plant Science, (5) Agricultural Mechanics, (6) Agricultural Management, (7) Supervised Experience Programs, (8) Leadership, and (9) Local Adaptation. The guide also includes suggestions for combining and adapting the subject matter for use in schools offering only a 3-year vocational agriculture program. (AW)

VT 008 079 ED 029 961 Grain, Feed, Seed, and Farm Supply Technology. A Suggested 2-Year Post High School Curriculum.

Office of Education (DHEW), Washington, D.C. EDRS PRICE MF-\$0.75 HC NOT AVAILABLE FROM EDRS.

OE-81014 Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402 (FS 5.281:81014, \$1.50). Pub Date - Dec68 194p.

AGRICULTURAL SUPPLIES; \*AGRICULTURAL SUPPLY OCCUPATIONS; \*AGRICULTURAL EDUCATION; \*AGRICULTURAL TECHNICIANS; \*PROGRAM GUIDES; \*CURRICULUM GUIDES; POST SECONDARY EDUCATION; PROGRAM DESCRIPTIONS; EDUCATIONAL FACILITIES; EDUCATIONAL EQUIPMENT; PROGRAM DEVELOPMENT; PROGRAM EVALUATION; BIBLIOGRAPHIES; COOPERATIVE EDUCATION;



164

PROFESSIONAL ASSOCIATIONS; COURSE DESCRIPTIONS; PROGRAM ADMINISTRATION; RECORDS (FORMS); INSTRUCTIONAL MATERIALS

The increasing need for skilled agricultural technicians for the grain, feed, seed, and farm supply industry resulted in preparation of this suggested curriculum guide to aid in planning, developing, and evaluating post-high school programs. The guide includes: (1) suggested course outlines with examples of texts and references, (2) sequence of technical education procedure, (3) laboratory layouts with equipment and costs, (4) a discussion of library, faculty and student services, and (5) a selected list of scientific, trade and technical societies. Consultants, advisors, owners and employers in the industry, elevator operator managers, and administrators and teachers in schools of technology provided suggestions to the agricultural and technical education specialist in the occupations section of the Division of Vocational and Technical Education who authored the document. Sections are: (1) The Grain, Feed, Seed, and Farm Supply Industry, (2) The Technician Education Program, (3) The Curriculum, (4) Course Outlines, (5) Facilities, Equipment and Cost, (6) Selecting Library Materials, and (7) Bibliography. Sample instructional materials and occupational experience forms are provided in the appendixes. (DM)

VT 008 642 A Guide for Planning Occupational Programs in Agricultural Mechanization.

New York State Education Dept., Albany. Bureau of Secondary Curriculum Development MF AVAILABLE IN VT-ERIC SET.
Publications Distribution Unit, New York State Department of Education, Albany, New York 12224 (\$.50). Pub Date - 69 36p.

\*VOCATIONAL AGRICULTURE; \*AGRICULTURAL MACHINERY; \*AGRICULTURAL MACHINERY OCCUPATIONS; \*PROGRAM GUIDES; GRADE 11; GRADE 12; PROGRAM DEVELOPMENT; OCCUPATIONAL INFORMATION; FACILITY GUIDELINES; INSTRUCTIONAL MATERIALS

Developed by a state supervisor of agricultural education with suggestions from an advisory committee representing the agriculture mechanization industry, this program guide is for use by teachers in designing and implementing a course of study in agricultural machinery. Students should be planning employment as mechanics, equipment operators, or as sales workers in agriulture equipment businesses. Chapters are: (1) Planning Programs in Agricultural Mechanization, (2) Suggestions for Developing Courses of Study, (3) Suggestions for Planning the Facilities for Agricultural Mechanization Programs, (4) Suggestions for Developing Lists of Needed Equipment and Supplies, and (5) Suggestions for Selecting Instructional Materials. Portions of this material may be adapted for use in pre-occupational information programs at the [unior-high school level; however, the course of study was specifically developed for 11th and 12th grade vocational agriculture students. Course content is recommended for various units including: (1) Orientation to the World of Work, (2) Agricultural Power Mechanics, (3) Soil Preparation Equipment, (4) Disease and Pest Control Equipment, (5) Harvesting Equipment, (6) Forest, Soil, and Water Management Equipment, (7) Agricultural Structure, (8) Planning a Shop Safety Program, and (9) Agricultural Machinery Business Management. (DM)

VT 008 646 Farm Business Management Report, 1968.

Saint Cloud Public Schools, Minn. Area Vocational-Technical School MF AVAILABLE IN VT-ERIC SET. Pub Date - 68 30p.

BULLETINS; \*FARM MANAGEMENT; \*FARM ACCOUNTS; \*ADULT FARMER EDUCATION; \*RECORDKEEPING; FARMERS; \*AGRICULTURAL EDUCATION; AGRICULTURAL PRODUCTION; ACTIVITY LEARNING; SUPERVISED FARM PRACTICE

Part of the central Minnesota farm management education program, this 1968 report is a financial summary of the individual farm business analysis made by high school agriculture instructors taking part in the program. Concerned with the practices and principles used in making decisions about alternative ways of using land, labor, capital, and management ability to acquire the greatest net income from farming, the farm management program is carried on for the purpose of helping farm families in recordkeeping, farm accounts, and farm business analysis through a cooperative program of both classroom instruction and on-farm individual instruction. Some of the areas covered are: (1) range of operator earnings, (2) cash and accrual statements, (3) feed costs and return on various types of livestock, (4) capital, assets, and liabilities, (5) livestock production and work output, (6) 5-year average yields, (7) crops grown, acre yields, and land use, (8) costs for power, buildings, and equipment use, (9) farm organization and management efficiency, (10) farm management factors over a 4-year period; (11) management measures for 1968, and (12) comparison of farm management factors for both high and low earning groups. The bulletin is illustrated with charts, graphs, and tables. (AW)

VT 008 949 Ruttle, Terence How to Grade Furs. Publication 1362.

Canadian Dept. of Agriculture, Ottawa (Ontario)
MF AVAILABLE IN VT-ERIC SET.
Information Division, Canada Department of Agriculture, Ottawa, Ontario, Canada (no charge).
Pub Date - 69 89p.

OCCUPATIONAL INFORMATION; \*TEXTBOOKS; \*AGRICULTURAL EDUCATION; \*ANIMAL SCIENCE; \*WILDLIFE MANAGEMENT; GRADING; PHOTOGRAPHS; CONSUMER EDUCATION \*FUR GRADING; FURS; FUR GRADERS

General principles that govern grading of raw skins of wild Canadian fur-bearing animals are described without undue technical detail. Personal experiences by the author assist in pointing out a wide variety of factors affecting pelt value. The content includes sections of: (1) Who Wants to be a Fur Grader, (2) What Is Fur Grading, (3) Factors to Consider, (4) Grades, (5) Long-Haired Furs, (6) Short-Haired Furs, and (7) Handling Pelts. Factors to Consider includes size, color, amount of fur, completeness of fur, damage to fur and skin, seasonableness, and appearance. The handling of pelt is discussed under headings of Scraping, Cleaning, Blending, Stretching and Drying, and Packaging. The first part of the book deals with general principles controlling grading of furs and a later section discusses different types of Canadian fur and shows how the general principles of grading apply to each variety or species. (DM)

VT 009 071
Some Vo-Ag Classroom and Laboratory Instructional Aids.

North Dakota State Univ., Fargo. Dept. of Agricultural Education MF AVAILABLE IN VT-ERIC SET. Mimeo No. 38-B.



AIM/WINTER 69

The North Dakota State University of Agriculture and Applied Science, Department of Agricultural Education, Fargo, North Dakota 58102 (single copies free to teacher-educators and state supervisors of agricultural education), Pub Date - Nov64 8p.

\*RESOURCE MATERIALS; EQUIPMENT STANDARDS; \*SUPPLIES; \*INSTRUCTIONAL MATERIALS; \*LABORATORY EQUIPMENT; \*VOCATIONAL AGRICULTURE

This mimeographed bulletin is designed to aid North Dakota school administrators in determining instructional equipment and aids needed for their vocational agriculture departments. Grouped by instructional areas, the materials listed relate to: (1) Crops, (2) Dairy, (3) Horticulture, (4) Livestock, General, and (5) Soils. Listings provide a brief description, the recommended quantity, and the cost of each item. A list of agricultural associations and related groups which will provide free teaching aids upon request is given. A related document is available as VT 009 079 (in this issue). (AW)

Suggested Films for North Dakota Vocational Agriculture Departments.

North Dakota State Univ., Fargo. Dept. of Agricultural Education MF AVAILABLE IN VT-ERIC SET.

The North Dakota State University of Agriculture and Applied Science, Department of Agricultural Education, Fargo, North Dakota 58102 (single copies free to teacher-educators and state supervisors of agricultural educ.).
Pub Date - Jan68 25p.

\*RESOURCE MATERIALS; \*FILMS; \*INSTRUCTIONAL AIDS; \*VOCATIONAL AGRICULTURE; BIBLIOGRAPHIES

This mimeographed bulletin is designed to aid North Dakota vocational agriculture instructors in selecting suitable films and filmstrips as teaching resources. The films listed are grouped according to the following subject areas: (1) Animal and Plant Breeding, (2) Animal Health, (3) Animal Nutrition, (4) Basic Horticulture, (5) Crop Production and Plant Science, (6) Entomology, (7) Farm Business Management, (8) Home Beautification, (9) Leadership and Future Farmers of America, (10) Livestock Production and Animal Science, (11) Mechanics, (12) Safety, (13) Occupations, (14) Soils, and (15) Miscellaneous. The listings give the title of each film, the length, whether black and white or color, source code, a brief description, rating, and a column for recording the showing date. The last three pages of the bulletin contain the availability sources. Suggestions to the instructor and a sample order form are included. (AW)

Consumable Supply List for Farm Mechanics and General Shop.

North Dakota State Univ., Fargo. Dept. of Agricultural Education MF AVAILABLE IN VT-ERIC SET.

Mimeo No. 38-A

The North Dakota State University of Agriculture and Applied Science, Department of Agricultural Education, Fargo, North Dakota 58102 (single copies free to teacher-educators and state supervisors of agricultural educ.). Fub Date - Nov64 15p.

\*RESOURCE MATERIALS; \*AGRICULTURAL ENGINEERING; \*VOCATIONAL AGRICULTURE; SCHOOL SHOPS; \*PROGRAM BUDGETING; \*SUPPLIES; PROGRAM PLANNING; EQUIPMENT STANDARDS

This bulletin is designed to aid instructors and school administrators in determining and budgeting for supplies and equipment needed for courses in vocational agriculture, farm mechanics, and general shop. Grouped by areas of instruction, supplies are listed for courses in carpentry, electricity, concrete construction, machinery repair, plumbing, soldering, and tractor and farm motors. The mimeographed list includes quantities, types, and costs of items needed. A related document, "Equipping the Farm Mechanics Shop," is available as VT 009 079 (in this issue). (AW)

Suggestions for Equipping the Farm Mechanics Shop.

North Dakota State Univ., Fargo. Dept. of Agricultural Education MF AVAILABLE IN VT-ERIC SET.

Mimeo No. 38. The North Dakota State University of Agriculture and Applied Science, Department of Agricultural Education, Fargo, North Dakota 58102 (single copies free to teacher-educators and state supervisors of agricultural educ.). Pub Date - Nov64 27p.

\*RESOURCE MATERIALS; \*AGRICULTURAL ENGINEERING; \*VOCATIONAL AGRICULTURE; \*SCHOOL SHOPS; \*LABORATORY EQUIPMENT; PROGRAM BUDGETING; EQUIPMENT STANDARDS; PROGRAM PLANNING

Prepared by a state supervisor of agricultural education in collaboration with members of the agricultural education department of North Dakota State University, this bulletin is designed to aid teachers and administrators in determining equipment needs for farm mechanics shops. The suggested equipment list includes items generally used in farm mechanics shops and should be adapted by the individual department to fit the needs of the local school and community. Tools and supplies are grouped according to areas of instruction: Carpentry, Concrete, Farm Drawing, Farm Electricity, Farm Plumbing, Machinery Repair, Soldering, Soil and Water Engineering, and Tractors and Farm Motors. Descriptions, including brand names, probable quantities needed, and costs of the recommended items are given. The mimeographed list includes a sample bid notice letter to be sent to prospective equipment suppliers. Related documents are available as VT 009 078 and VT 009 071 (both in this issue). (AW) issue). (AW)

Books and Reference Material for Use in North Dakota Vocational Agriculture Departments.

North Dakota State Univ., Fargo. Dept. of Agricultural Education

The North Dakota State University of Agriculture and Applied Science, Department of Agricultural Education, Fargo, North Dakota 58102 (single copies free to teacher-educators and state supervisors of agricultural educ.). Jan68 23p. Pub Date -

\*RESOURCE MATERIALS; \*AGRICULTURAL EDUCATION; \*BOOKLISTS; REFERENCE BOOKS; TEXTBOOKS; INSTRUCTIONAL MATERIALS; \*VOCATIONAL AGRICULTURE

This mimeographed bulletin is designed to aid North Dakota vocational agriculture teachers in selecting reference materials and books for classroom use. Listed according to subject fields, materials relate to: (1) Agricultural Mechanics, (2) Agricultural Occupations, (3) Animal and Plant Breeding (Genetics), (4) Animal



166 AIM/WINTER 69

Science, (5) Entomology, (6) Farm Business Management, (7) Horticulture, (8) Leadership and Future Farmers of America, (9) Crop Production and Plant Science, (10) Professional Improvement, and (11) Soils and Soil Management. To aid in selection, those materials recommended primarily as reference materials are designated by an asterisk. The listings include reference title and related information, year of publication, source code, and price. The last two pages of the bulletin contain the source listings. (AW)

VT 009 173 Sears, Stan Swine Carcass Evaluation.

California State Polytechnic Coll., San Luis Obispo. Animal Husbandry Dept.
California State Dept. of Education, Sacramento. Vocational Education Section
DOCUMENT NOT AVAILABLE FROM EDRS.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$6.50 for illustrated script and filmstrip).
Pub Date - nd 21p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*SWINE; \*MEAT; EVALUATION; SECONDARY GRADES; POST SECONDARY GRADES
\*\*CARCASS EVALUATION

Teachers and students in high schools and junior colleges may use this illustrated script and companion 60-frame filmstrip in vocational agriculture classes for a 50-minute period. The development group included college faculty and high school teachers. Subject-matter specialists and teachers reviewed the content prior to publication. The first eight frames point out desirable and undesirable characteristics of swine. Four 12-frame classes of market hogs illustrate the live animals and the rib, dorsal, and chop views of the carcasses. The narrative provides suggested placings with comments on each class and illustrates the points to evaluate in selecting meat-type market hogs. Students should be of average ability. Additional resource information is desirable when studying the topic. (DM)

VT 009 177
Weston, Curtis R., And Others
Resource Material for Teaching Agricultural Mechanics. Agricultural Education Series, Volume 1-Number 2.

Missouri Univ., Columbia. Dept. of Agricultural Education
Missouri State Dept. of Education, Jefferson City. Agricultural Education Section
MF AVAILABLE IN VT-ERIC SET.
Teaching Aids Fund, 122 Waters Hall, University of Missouri, Columbia, Missouri 65201 (\$2.00).
Pub Date - 68 102p.

\*RESOURCE MATERIALS; \*VOCATIONAL AGRICULTURE; \*AGRICULTURAL ENGINEERING; \*INSTRUCTIONAL MATERIALS; POST SECONDARY GRADES; SECONDARY GRADES; FILMS; FILMSTRIPS; SLIDES; TEXTBOOKS; BULLETINS; \*BIBLIOGRAPHIES

Compiled by graduate students, this bulletin is a source listing of materials available for teaching agricultural mechanics. It is desied for use by vocational agriculture teachers in ordering instructional materials for high school or area junior college agricultural mechanics courses. Grouped according to subject matter, the listings include the title of the item, brief descriptive information, type or order number if applicable, category (e.g. textbooks, filmstrips), source code, and cost. Availability sources are listed both alphabetically and numerically. Subject areas illustrated are: (1) Building and Structures, (2) Concrete and Masonry, (3) Electricity, (4) Irrigation and Farm Water Equipment, (5) Materials Handling, (6) Metal Work, (7) Power and Machinery, (8) Lubrication, Oil, and Fuel, (9) Safety, (10) Shop Projects, (11) Woodwork, and (12) Professional and General Material. (AW)

VT 009 195 Curriculum Guide for Ornamental Horticulture.

Oregon State Board of Education, Salem MF AVAILABLE IN VT-ERIC SET.
Oregon Board of Education, 942 Lancaster Drive, N.E., Salem, Oregon 9730% (single copies without charge). Pub Date - Jun69 47p.

\*CURRICULUM GUIDES; \*PROGRAM GUIDES; \*AGRICULTURAL EDUCATION; POST SECONDARY GRADES; \*ORNAMENTAL HORTICULTURE OCCUPATION; SECONDARY GRADES; INSTRUCTIONAL MATERIALS; BIBLIOGRAPHIES; FACILITIES; \*ORNAMENTAL HORTICULTURE

The purpose of this curriculum guide is to assist school administrators, vocational directors, and instructors in establishing and conducting articulated programs in ornamental horticulture between the high school and the community college. Developed by a state coordinator of agriculture education in cooperation with horticultural industry representatives and horticulture teachers, the guide covers: (1) Occupational Opportunities in Ornamental Horticulture, (2) Development and Use of the Guide, (3) Proposed Course of Study for Horticultural Occupations, (4) Suggested Facilities for Horticultural Programs, (5) Suggested Equipment and Supplies, and (6) Instructional Materials and References. Unit II gives purposes, occupational objectives, and a topical outline listing competencies to be developed in both a beginning and an advanced phase of study. Suggested course outlines are provided for the second year community college specialty horticulture options of landscape design, turf management, greenhouse management, and nursery management. Sections on plants to be identified, selected horticultural occupations and tasks, duties required in typical horticultural occupations, and a summary of tasks performed in horticultural occupations are appended. The instructor should be a subject matter specialist, and students should have an occupational goal of ornamental horticulture. (AW)

VT 009 282 Grounds Care: Custodial Training Course.

Florida State Dept. of Education, Tallahassee
MF AVAILABLE IN VT-ERIC SET.
School Plant Management Section, State Department of Education, Tallahassee, Florida.
Pub Date - nd 128p.

\*STATE CURRICULUM GUIDES; \*AGRICULTURAL EDUCATION; \*CUSTODIAN TRAINING; \*GROUNDS KEEPERS; \*ORNAMENTAL HORTICULTURE; ADULT VOCATIONAL EDUCATION; SITE DEVELOPMENT; SCHOOL MAINTENANCE; INSERVICE EDUCATION; RETRAINING FLORIDA

Designed as part of an occupational cluster for custodial training in the Southeastern United States, this curriculum guide is for use in planning training or retraining courses in grounds care. It was prepared by the Florida State Coordinator of Custodial and Maintenance Training with the assistance of an administrator of school plant management to provide a comprehensive reference for custodians, school administrators, and operations personnel responsible for the appearance of school sites. Unit topics are: (1) Lawns, which deals

ERIC

167

with types of grasses, soil preparation and planting, and general care, (2) Recreational Areas, including standards for accreditation, (3) Shrubbery, covering selection, care, and types, (4) Trees, including care of tree wounds, (5) Equipment, which gives detailed information on use and need for various hand and power tools, and (6) Pest Control, including classification of pests and information on various types of pesticides. The manual is illustrated with numerous drawings, tables and diagrams; a map designating Florida soil types is also included. The proposed program should be taught by a subject matter specialist. (AW)

VT 009 287
Becket, James W.
Supervision in Agriculture: A Unit of Instruction.

California Univ., Davis. Dept. of Applied Behavioral Sciences
California State Dept. of Education, Sacramento. Bureau of Agricultural Education
MF AVAILABLE IN VT-ERIC SET.
Department of Applied Behavioral Sciences, University of California at Davis, Davis, California 95616 (single copies without charge).
Pub Date - 68 73p.

\*TEACHING GUIDES; \*VOCATIONAL AGRICULTURE; CURRICULUM GUIDES; \*SUPERVISORY TRAINING; \*SUPERVISORS; \*FARM MANAGEMENT; SUPERVISOR QUALIFICATIONS; CREW LEADERS; FARM LABOR; COMMUNITY COLLEGES; VOCATIONAL HIGH SCHOOLS; UNITS OF STUDY (SUBJECT FIELDS); EDUCATIONAL GAMES; CASE STUDIES CALIFORNIA

Prepared by a subject matter specialist with assistance from a teacher committee and field tested in 10 schools prior to revision and publication, this instructional unit is for teacher use in planning and conducting courses in agricultural supervision and labor management on the community college or advanced vocational high school level. The content is comprised of 11 sub-units: (1) Introduction, (2) Basic Needs of Humans, (3) Meeting Needs of Humans on the Job, (4) Communications, (5) Problem Solving, (6) Worker Selection, (7) Instructing Workers, (8) Worker Efficiency and Loss of Time, (9) Working Conditions, (10) Employer-Employee Responsibilities, and (11) Labor Rules and Regulations. The sub-units are set up in outline form and most include objectives, suggested procedures to be followed by the teacher, content, and concepts to be developed. The appendix provides historical information on California farm labor, a sample job breakdown sheet, case studies, a game illustrating communication problems, and an anecdote emphasizing the need for motivation. Suggested references are also listed. The instructor of the 20-hour course needs supervisory experience and students should be management or supervisory trainees. (AW)

VT 009 293 Morgan, William P., Jr. A Manual on Nursery Practices. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo
MF AVAILABLE IN VT-ERIC SET.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$1.00).
Pub Date - nd 77p.

\*VOCATIONAL AGRICULTURE; \*NURSERIES (HORTICULTURE); \*NURSERY WORKERS (HORTICULTURE); \*SUPPLEMENTARY TEXTBOOKS; \*ORNAMENTAL HORTICULTURE; SECONDARY GRADES; POST SECONDARY GRADES; AGRICULTURAL PRODUCTION; PLANT PROPAGATION; SANITATION

A great landscaping demand for plants and trees and shrubs has put new emphasis on the need for men and women trained in the nursery business. This nursery production guide was designed by college faculty and high school teachers for use in high school and junior college classes of vocational agriculture by both teachers and students. The content was reviewed by teachers and subject matter specialists. Part I discusses the propagation of seeds in flats, pots, and bands. The second section covers vegetative propagation under headings of: (1) Stem Cuttings, (2) Root Cuttings, (3) Layering, (4) Division, (5) Separation, (6) Getting the Cutting to Root, (7) Planting the Cutting, (8) Transplanting Rooted Cuttings into Containers, and (9) Transplanting into Gallon Cans. The importance of nursery sanitation, clean propagating material, and soil sterilization, are discussed in Part III. Appended are 15 tables of propagation information data, a list of plant hormone preparations, soil mixtures, and list of reference books. Line drawings illustrate the text. (DM)

VT 009 294
Gray, Stanton; Andrews, Dale
Judging Deciduous Fruit Trees; Manual. Instructional Materials for Use in Agricultural Education.

California State Polytechnic Coll., San Luis Obispo
MF AVAILABLE IN VT-ERIC SET.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$.35).
Pub Date - nd 20p.

\*HORTICULTURE; \*EVALUATION; \*VOCATIONAL AGRICULTURE; \*TREES; \*SUPPLEMENTARY TEXTBOOKS; TEACHING GUIDES; SECONDARY GRADES; BIBLIOGRAPHIES; INSTRUCTIONAL MATERIALS; POST SECONDARY GRADES \*DECIDUOUS FRUIT TREE JUDGING

Developed by college faculty and high school teachers for use in high school or junior college classes of vocational agriculture, this manual discusses deciduous fruit tree judging as a method of providing students with an opportunity to apply their knowledge of correct or incorrect scaffold arrangement of limbs, proper amount of shoot growth, prevalence of fruit buds, the detection of diseases or insects and other factors important in evaluating trees for heavy production of high quality fruit. The content includes: (1) Introductory Ideas for Students of Tree Judging, (2) Equipment and Materials for Teaching and Learning Tree Judging, (3) Suggested Teaching-Learning Activities, (4) Tree Judging Procedures, (5) Tree Judging Score Cards, (6) Guide for Tree Examination, (7) Conduct State FFA Tree Judging Contest, (8) Tree Parts, (9) Tree Scaffolds, and (10) Key Tree Judging Points Illustrated. Supplementary material includes a glossary, a list of reference books, and line drawings which illustrate the text. (DM)

VT 009 296
Insects Identification Manual; Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo California State Dept. of Education, Sacramento MF AVAILABLE IN VT-ERIC SET. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$2.50). Pub Date - 66 127p. 168

\*SUPPLEMENTARY TEXTBOOKS; \*RESOURCE MATERIALS; \*VOCATIONAL AGRICULTURE; \*ENTOMOLOGY; \*TAXONOMY; SECONDARY GRADES; POST SECONDARY GRADES; AUDIOVISUAL AIDS; ILLUSTRATIONS

Developed by high school and college teachers and reviewed by subject matter specialists prior to revision and publication, this handbook is for both teacher and student use in high school or junior college vocational agriculture classes. It is designed to aid students in the identification of common agricultural insects. The subject matter is geographically adaptable to the entire United States, and particularly applicable to the western section. Part I, a general section, gives suggested learning activities, brief information on insect control and safety precautions, sample study sheets, reference and source materials, a glossary of terms, and several charts and diagrams illustrating seasonal histories and body parts of various insects. Part II, Identification Series, presents information on 48 different insects, including drawings and descriptions, life history, types of damage done by each, hosts, and references and additional information sources. The illustrations are suitable for reproduction as transparencies or as other instructional materials. The recommended time allotment for viewing and discussion of the material is one or two class periods. (AW)

VT 009 297
Berman, James
Small Gasoline Engines, (Ornamental Horticulture). A Laboratory Guide for Teachers.

California State Polytechnic Coll., San Luis Obispo
California State Dept. of Education, Sacramento
MF AVAILABLE IN VT-ERIC SET.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$1.80).
Pub Date - 68 29p.

ACHIEVEMENT TESTS; ANSWER KEYS; \*LABORATORY MANUALS; SUPPLEMENTARY TEXTBOOKS; \*AGRICULTURAL ENGINEERING; \*ORNAMENTAL HORTICULTURE OCCUPATION; \*VOCATIONAL AGRICULTURE; AUTO MECHANICS; \*EQUIPMENT MAINTENANCE; POST \*SMALL GASOLINE ENGINES

This teaching guide consists of a series of laboratory exercises designed to acquaint the high school or junior college vocational agriculture students with the care, maintenance, and repair of small gasoline engines and power equipment used in ornamental horticulture. Developed by high school and college teachers and reviewed by subject matter specialists prior to publication, the manual is intended to supplement standard textbooks. The subject matter is geographically adaptable to the entire United States, but is particularly applicable to the western segment. The 10 laboratory exercises, totaling 20 hours, cover: (1) Internal Combustion Engine Principles, (2) Valves, Timing, and Tappet Clearance, (3) Ignition Principles, (4) Carburetion, (5) Maintenance and Lubrication, (6) Disassembly Procedures, (7) Power Transmission Components, (8) Starters, (9) Sharpening, and (10) Trouble Shooting. Each exercise includes materials and tools needed, teaching aids required or suggested, student requirements, procedures, and quizzes with answers. Selected references, detailed tool lists, and various diagrams and charts are appended. (AW)

VT 009 298 Carter, L.S.; Leighty, R.V. Soils Manual for Land Judging. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo MF AVAILABLE IN VT-ERIC SET. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$1.00). Pub Date - nd 63p.

\*SUPPLEMENTARY TEXTBOOKS; \*VOCATIONAL AGRICULTURE; CONSERVATION EDUCATION; \*LAND USE; \*SOIL CONSERVATION; \*SOIL SCIENCE; AGRONOMY; SECONDARY GRADES; POST SECONDARY GRADES; \*LAND JUDGING

Developed by high school and college teachers and reviewed by subject matter specialists, this manual is for use in high school and junior college vocational agriculture classes. Its purpose is to acquaint students with the basic principles of judging land, of communicating land value to others, and of selecting the management practices best suited to keep the land productive. The content contains sections on (1) site selection for land judging, (2) surface and subsurface soils, (3) interpreting soil features, (4) erosion problems, (5) topography, (6) classification of land capability, (7) appropriate uses of land, (8) problems in land use, (9) cropland, rangeland, and woodland management, and (10) reclamation. The final two chapters deal with land judging contests and include a sample land judging scorecard. Diagrams, photographs, tables, and drawings illustrate the manual. Geographically the material is adaptable to the entire United States, with particular interest to the western segment. One or two class periods is the recommended time allotment for covering the subject. (AW)

VT 009 299
Duarte, Arthur C.; Morris, Harold D.
DuMore Farm Records Problem.

California State Polytechnic Coll., San Luis Obispo. Farm Management Dept.
California State Dept. of Education, Sacramento
MF AVAILABLE IN VT-ERIC SET.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 9340¹
(\$2.50).
Pub Date - 68 57p.

\*UNIT PLAN; SUPPLEMENTARY TEXTBOOKS; \*VOCATIONAL AGRICULTURE; \*RECORDKEEPING; \*FARM MANAGEMENT; \*FARM ACCOUNTS; RECORDS (FORMS); PROBLEM SETS; SECONDARY GRADES; UNITS OF STUDY (SUBJECT FIELDS)

This farm records problem is designed to be used as a teaching unit by vocational agriculture instructors in high schools or junior colleges. The purpose of the unit is to present a simplified but adequate system of keeping farm records to students who will be involved in the business of farming whether or not they pursue advanced agricultural training. Based on a typical farm, the problem was prepared by high school and college teachers and reviewed by subject matter specialists to supplement standard vocational agriculture textbooks. The problem is divided into four sections; (1) Inventories, dealing with the setting up of basic inventory records and extraction of a beginning-of-the-year balance sheet, (2) Journalizing, concerned with the record of new purchases into property book and calculation of their depreciation, and (4) Year-End Records, which consists of posting year-end inventories and extracting profit and loss statement and balance sheet. Sample Record sheets to be kept for each stage of the problem comprise the last segment of the manual. (AW)

AIM/WINTER 69

VT 009 300 Thrasher, Frank P., And Others Exercises for Biological Principles in Agricultural Crops.

California State Polytechnic Coll., San Luis Obispo
California State Dept. of Education, Sacramento
MF AVAILABLE IN VT-ERIC SET.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$2.50).
Pub Date - 66 75p.

\*CURRICULUM GUIDES; \*VOCATIONAL AGRICULTURE; \*PLANT SCIENCE; \*LABORATORY EXPERIMENTS; PLANT PROPAGATION; PLANT GROWTH; AGRONOMY; \*INSTRUCTIONAL MATERIALS; SECONDARY GRADES; POST SECONDARY GRADES

Prepared by high school and college teachers, this manual is designed primarily to aid high school or junior college agricultural and biological science teachers in introducing vocational agriculture students to the principles of plant science. The 24 exercises provided are organized into units illustrating one or more basic principles. Unit topics are: (1) Plant Ecology, with four exercises, (2) Photosynthesis, with four exercises, principles. Unit topics are: (1) Plant Ecology, with four exercises, (5) Osmosis and Diffusion, with two exercises, (6) Growth, with one exercises, (7) Growth Regulation in Plants, with three exercises, (8) Asexual Reproduction, with three exercises, (9) Sexual Reproduction in Plants: Seeds and Plant Breeding, with two exercises, and (10) Genetics, with one exercise. Each unit gives brief introductory material, followed by the exercises, which include materials needed, procedures, and study questions. A sample student worksheet for use exercises, which include materials needed, procedures, and study questions. A sample student worksheet for use in carrying out the exercises and a bibliography are included, and the manual is illustrated with drawings and in carrying out the exercises and a bibliography are included, and the manual is illustrated with drawings and diagrams suitable for reproduction as transparencies or other instructional materials. The material is geographically adaptable to the entire United States, and of particular interest to the western part. Individual teachers should select or modify exercises to fit local needs. (AW)

VT 009 301 Tool Identification Manual. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo
MF AVAILABLE IN VT-ERIC SET.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 9340 (\$1.00).
Pub Date - nd 54p.

MANUALS; \*VOCATIONAL AGRICULTURE; \*AGRICULTURAL ENGINEERING; \*EQUIPMENT; \*HAND TOOLS; \*INSTRUCTIONAL MANUALS; \*VOCATIONAL AGRICULTURE; \*AGRICULTURAL ENGINEERING; \*EQUIPMENT; \*HAND TOOLS; \*INSTRUCTIONAL MANUALS; \*MECHANICAL EQUIPMENT; VOCABULARY; AUDIOVISUAL AIDS; SECONDARY GRADES; POST SECONDARY GRADES

Developed by an individual in cooperation with college departments of agricultural engineering, education, and audiovisual materials, this manual is for use by high school and junior college vocational agriculture instructors as an aid in teaching nomenclature and uses of tools and materials associated with agricultural mechanics. The manual includes 331 tools and pieces of equipment, arranged alphabetically by item name. The mechanics arranged and provides definitions and uses of these items, and the second, visual reproductions of the tools, arranged and numbered in the same order as the definitions. The nomenclature used is in agreement with the 1959 Curricular Activities Code published by the California Agriculture Teachers agreement with the 1959 Curricular Activities Code published by the California is identification in the State Association which is recognized as the official authority for tools and materials identification in the State Championship Future Farmers of America judging contest in agricultural mechanics. (AW)

VT 009 302 Chizek, Gaylord J.; Rogalla, John A. Shady Lane Farm Management and Records Problem.

California State Polytechnic Coll., San Luis Obispo. Farm Management Dept.
California State Dept. of Education, Sacramento
MF AVAILABLE IN VT-ERIC SET.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 9340° (\$2.50).
Pub Date - nd 54p.

\*VOCATIONAL AGRICULTURE; RECORDKEEPING; \*FARM MANAGEMENT; \*FARM ACCOUNTS; \*BUDGETING; RECORDS (FORMS); SECONDARY GRADES; POST SECONDARY GRADES; \*RESOURCE MATERIALS; UNITS OF STUDY (SUBJECT FIELDS)

Developed by high school and college teachers, this farm records manual is designed for use by vocational agriculture students on the high school or junior college level. The record problem comprising the first part of the manual is designed as an exercise for a beginning course in farm management, while the budget problem which makes up the second part of the manual is intended to aid the student in estimating financial outcomes which makes up the second part of the manual is intended to aid the student in estimating financial outcomes of future plans or reorganized farm operations. Part one includes brief explanatory information on the problem, and instructions on setting up the books, journalizing, keeping transaction records, closing the books and preparing income tax forms, and analyzing the records. Various sample farm records and forms are included in this section. The budgeting section includes a general outline of the budgeting process, followed by an this section. The budgeting section includes a general outline of the budgeting process, followed by an application of the outline to the specific budget problem posed by the sample "J Ranch." This section is application of the outline to the specific budget problem posed by the sample "J Ranch." The record portion should take the illustrated with various maps and drawings pertaining to the "J Ranch." The record portion should take the student about 20 hours and the budget portion about 4 hours for completion. (AW)

VT 009 303 Carter, Logan S. Experiments in Soil Science. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo California State Dept. of Education, Sacramento MF AVAILABLE IN VT-ERIC SET. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.00). Pub Date - 66 252p.

\*LABORATORY MANUALS; \*LABORATORY EXPERIMENTS; \*VOCATIONAL AGRICULTURE; \*SOIL SCIENCE; \*AGRONOMY; POST SECONDARY GRADES; SECONDARY GRADES

Developed by high school and college teachers, this series of soil science laboratory exercises is designed to aid high school or junior college vocational agriculture students in understanding the basic principles of physical and biological sciences as they relate to agriculture. Contents include 57 experiments under the following topic headings: (1) Minerals and Rocks Important in Soil Formation, (2) Formation of Soils, (3)



170 AIM/WINTER 69

Soil Texture, (4) Soil Properties Related to Texture, (5) How to Make a Miniature Soil Profile, (6) Are Soils Alike? (7) Field Study of Local Soils, (8) Determining Slope of Land, (9) Soil Moisture, (10) Soil Testing, (11) Commercial Fertilizers, (12) Soil Colloids, (13) Soil Organic Matter, (14) Soil Organisms, (15) Soil Correction, (16) Soil Structure, (17) Land Judging, and (18) Maps and Reports. Most exercises include materials needed, procedures, applications, and selected references, and many are illustrated with graphs, charts, tables, drawings, and photographs suitable for reproduction as transparencies or other instructional materials. A glossary and tables of weights and measures are also included. (AW)

VT 009 307 Johnson, Harold C. The Brood Sow and Litter.

California State Polytechnic Coll., San Luis Obispo. Dept. of Animal Husbandry
California State Dept. of Education, Sacramento
DOCUMENT NOT AVAILABLE FROM EDRS.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$5.00 for filmstrip and illustrated script). Pub Date -66 18p.

\*SWINE; \*AGRICULTURAL PRODUCTION; \*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; SECONDARY GRADES; POST SECONDARY GRADES; LIVESTOCK

This full-color filmstrip of 49 frames and its companion manual illustrate and explain management procedures for the brood sow and litter; farrowing facilities, preparation for farrowing, farrowing and immediate operations, and additional operations. In addition to a description of each slide frame, the manual presents an ear-notching system to identify litters and the pigs in each litter. The filmstrip was developed by college faculty and high school teachers and is for use in high school and junior college classes of vocational agriculture. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. Students should be of average ability, Additional resource information is desirable when studying the topic.

VT 009 308
Sankoff, Leo
Anatomy of the Fowl; A Color Filmstrip and Manual. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip). Pub Date -65 17p.

\*POULTRY; \*ANATOMY; \*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; SECONDARY GRADES; POST SECONDARY GRADES; ANIMAL SCIENCE; VETERINARY MEDICINE

Developed by college faculty and high school teachers, this 54-frame color filmstrip and companion script is for use in high school and junior college classes of vocational agriculture. Subject-matter specialists and teachers reviewed the 1- and 2-hour unit prior to its publication. The content provides some knowledge of the normal external and internal appearances of birds and of various organs as background information prior to determining causes of sickness or death (How to Do a Poultry Autopsy, VT 009 326, in this issue). The various parts of the anatomy discussed include: (1) skeleton, (2) muscular structure, (3) digestive system, (4) respiratory system, (5) spleen, (6) kidneys, and associated systems, (7) reproductive system, and (8) feathers. Students should be of at least average ability. Additional resource information is desirable when studying the tonic. (DM) the topic. (DM)

VT 009 309
Sankoff, Leo
Grading Eggs for Quality; A Color Filmstrip and Syllabus. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$3.50 for illustrated script and filmstrip). Pub Date nd 13p.

\*POULTRY; \*FOOD AND DRUG INSPECTORS; \*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; POST SECONDARY GRADES; STATE STANDARDS; SECONDARY GRADES; FOOD PROCESSING OCCUPATIONS \*EGG GRADING; CALIFORNIA

Developed by college faculty and high school teachers, this 43-frame color filmstrip and accompanying script is for use in high school and junior college classes of vocational agriculture. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. The content includes: (1) parts of an egg, (2) grades of eggs, (3) standards of quality for various grades, (4) pictorial descriptions of each grade, and (5) common defects. Students should be of average ability. Additional resource materials are desirable when studying the topic. (DM)

Allen, Ray; Seeber, Glenn
Oxy-Acetylene Welding: Setting up the Equipment and Lighting the Torch; A Color Filmstrip and Manual.
Insructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California (\$4.50 for filmstrip and illustrated script). Pub Date -65 **1**6p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*WELDERS; \*WELDING; POST SECONDARY GRADES; SECONDARY GRADES; AGRICULTURAL ENGINEERING; SAFETY EDUCATION \*OXY ACETYLENE WELDING

171

### AIM/WINTER 69

This full-color filmstrip of 53 frames and its companion illustrated script detail the necessary and proper procedures in setting up oxy-acetylene welding equipment and lighting the oxy-acetylene torch. The filmstrip may be used to demonstrate safety procedures while actual welding equipment is being prepared for operation. It was developed by college faculty and high school teachers for use in high school and junior college vocational agriculture classes. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. Students should be of average ability. Additional resource information is desirable when studying the topic. This filmstrip may be used an an introduction to the one announced as VT 009 311 (in this issue). (DM)

VT 009 311 Seeber, Glenn; Allen, Ray Oxy-Acetylene Welding: Flat Position Welds.

California State Polytechnic Coll., San Luis Obispo California State Dept. of Education, Sacramento DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$6.50 for filmstrip and illustrated script). Pub Date - 68 20p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*WELDING; \*WELDERS; AGRICULTURAL ENGINEERING; SAFETY EDUCATION; SECONDARY GRADES; POST SECONDARY GRADES \*OXY ACETYLENE WELDING

Teachers and students in high schools and junior colleges may use this illustrated script and accompanying 68-frame filmstrip in vocational agriculture classes. The development group included college faculty and high school teachers. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. The content includes: (1) welding equipment, (2) adjusting the flame, (3) a corner-fusion-joint weld, (4) a puddling exercise, (5) a beading exercise, (6) backfire in the torch, (7) the butt joint, (8) the lap joint, (9) the tee joint, and (10) safety procedures in turning off the torch. The filmstrip announced as VT 009 310 (in this issue) should be used prior to this unit. Students should be of average ability. Additional resource information is desirable when studying the topic. (DM)

### VT 009 312 Vegetables.

California State Polytechnic Coll., San Luis Obispo California State Dept. of Education, Sacramento DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for filmstrip and illustrated script). Pub Date - nd 28p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*HORTICULTURE; \*PLANT IDENTIFICATION; PLANT SCIENCE; POST SECONDARY GRADES; SECONDARY GRADES; EXHIBITS; AGRICULTURAL PRODUCTION \*VEGETABLES; CALIFORNIA

This full-color filmstrip of 85 frames and its companion illustrated manual present 65 vegetables classified by their botanical families: (1) Sunflower Family, (2) Mustard Family, (3) Goosefoot Family, (4) Carpet-Weed Family, (5) Pea Family, (6) Grass Family, (7) Buckwheat Family, (8) Lily Family, (9) Parsley Family, (10) Sweet Potato Family, (11) Nightshade Family, and (12) Gourd Family. All vegetable photographs have inch-square grids in the background so students can obtain a size reference for the actual measurement of the vegetable. The introductory slides also present an orientation to vegetable production facilities, packaging, food markets, and displays. The filmstrip was developed by college from lty and high school teachers for use in high school and junior college classes of vocational agricultur. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. Students should be of average ability. Additional resource information including textbooks, bulletins and films are cited in the manual for use when studying the topic. (DM)

VT 009 313
Tucker, Jeanne
Beginning Techniques in Flower Arranging; A Color Filmstrip and Manual. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$7.00 for illustrated script and filmstrip). Pub Date - 65 25p.

\*FLORICULTURE; \*EXHIBITS; \*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; JOB SKILLS; ORNAMENTAL HORTICULTURE OCCUPATIONS; SECONDARY GRADES; POST SECONDARY GRADES \*FLOWER ARRANGING

Teachers and students in high schools and junior colleges may use this illustrated script and companion 87-frame color filmstrip in vocational agriculture or ornamental horticulture classes. The development group included college faculty and high school teachers. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. The content covers: (1) flower shapes, including line, mass, form, and filler flowers, (2) selecting and gathering flowers, (3) equipment for arranging, (4) patterns of arranging, (5) developing various arrangements, and (6) examples of arrangements. Students should be of average ability. Additional resource information is desirable when studying the topic. (DM)

VT 009 314 ED 032 428
Brown, Howard C., And Others
Developing a High School Program in Ornamental Horticulture. Volume I, Numsery Management.

California State Polytechnic Coll., San Luis Obispo EDRS PRICE MF-\$0.50 HC NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$2.50). Pub Date - 66 121p.



172 AIM/WINTER 69

\*NURSERIES (HORTICULTURE); \*VOCATIONAL AGRICULTURE; \*MANAGEMENT; \*PROGRAM GUIDES; \*PROGRAM ADMINISTRATION; ORNAMENTAL HORTICULTURE OCCUPATION; MANAGERIAL OCCUPATIONS; SECONDARY GRADES; POST SECONDARY GRADES; PUBLIC RELATIONS; EDUCATIONAL FACILITIES; PROGRAM DEVELOPMENT; CURRICULUM CALIFORNIA

This manual is one of a 3-volume series prepared to guide the high school vocational agriculture teacher in teaching ornamental horticulture. Chapter I introduces the reader to ornamental horticulture and gives examples of how the subject can be integrated into an existing agriculture curriculum. Chapter II is devoted to the public relations implications of an ornamental horticulture program. Chapter III deals with the layout of physical facilities, discusses garden plot layout, and includes a list of plants recommended for each season. Presented in outline form so it may be used as a teaching unit, Chapter IV, "The Nursery Industry," includes suggestions for individual student and class projects. Suggestions on how to initiate an instructional program in ornamental horticulture in high school curriculums are presented in Chapter V, and Chapter VI considers the relationship of plant production and student project activity to classroom work as well as legal implications of plant sales. Chapter VII contains a suggested calendar of monthly operations in the garden and nursery and a list of monthly topics for classroom presentation. Information plans and illustrations describing construction of a lathe house for use in high school ornamental horticulture program conclude the document. (DM)

VT 009 315

Judging Vegetable Crops; Handbook. Instructional Materials for Use in Agricultural Education.

California State Polytechnic Coll., San Luis Obispo
MF AVAILABLE IN VT-ERIC SET.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$.35).
Pub Date - nd 18p.

\*VOCATIONAL AGRICULTURE; \*HORTICULTURE; \*FIELD CROPS; \*EVALUATION; PLANT IDENTIFICATION; SECONDARY GRADES; POST SECONDARY GRADES; \*STUDY GUIDES \*VEGETABLE CROP JUDGING

Developed by college faculty in cooperation with high school teachers, this student handbook is for use in high schools and junior colleges as a reference for judging vegetable crops. It was reviewed by teachers and subject matter specialists for use in training students for Future Farmers of America (FFA) vegetable crop judging contests. The content discusses: (1) identification of vegetables, diseases, insect damage, defects and weeds, (2) vegetable judging contest rules and conduct, (3) methods of judging, the score card, characteristics of vegetables judged, and procedures in judging, (4) giving reasons for places, and (5) references and companies handling vegetable seeds. (DM)

VT 009 317

Webster, James P., Jr. Use of the Level: Reading the Rod.

California State Polytechnic Coll., San Luis Obispo. Dept. of Agricultural Engineering California State Dept. of Education, Sacramento DOCUMENT NOT AVAILABLE FROM EDRS.

Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$6.50 for illustrated script and filmstrip).

Pub Date - 68 14p.

\*EQUIPMENT UTILIZATION; \*AGRICULTURE ENGINEERING; \*VOCATIONAL AGRICULTURE; \*FILMSTRIPS; \*SCRIPTS; SECONDARY GRADES; POST SECONDARY GRADES \*SURVEY INSTRUMENTS (ENGINEERING)

Developed by subject-matter specialists and reviewed by teachers, this 39-frame color filmstrip and companion script is for use in high school and junior college classes of vocational agriculture. Following the 1- to 2-hour presentation of the filmstrip, students may use the script to review the materials and as a guide in practice exercises. The content includes presentation of the types of utilization of levels, how to read various types of rods, the parts of the rod, and sample problems. Students should be of average ability. Additional resource information is desirable when studying the topic. This unit should follow VT 009 341 (in this issue). (DM)

VT 009 318
Toone, Harmon B.; Baugh, Frank
Fitting and Showing FFA Dairy Cattle; Color Filmstrip and Illustrated Syllabus. Instructional Materials for Use in Agricultural Education.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS.

Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip).

Pub Date - nd 18p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*CATTLE; \*EXHIBITS; SECONDARY GRADES; POST SECONDARY GRADES; ANIMAL SCIENCE; STUDENT PROJECTS; LIVESTOCK \*FAIRS

Teachers and students in high schools and junior colleges may use this illustrated script and accompanying 60-frame filmstrip in vocational agriculture classes. The development group included college faculty and high school teachers. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its production. The content includes (1) Animal Selection, (2) Fitting for the Show, including breaking, feeding, washing, equipment, clipping, and hoof trimming, and (3) Show Day, including feeding, grooming, and showmanship. Students should be of average ability. Additional resource information is desirable when studying the topic. (DM)

VT 009 319
Lowrie, Alice
CO-OPS; (Cooperative Organizations Offering Producers Services). Instructional Materials for Use in Agricultural Education.



173

California State Polytechnic Coll., San Luis Obispo. Agricultural Council of California DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip). Pub Date nd 22p.

\*COOPERATIVES; \*FARMERS; \*VOCATIONAL AGRICULTURE; \*FILMSTRIPS; \*SCRIPTS; BUSINESS ADMINISTRATION; MARKETING; SERVICES; ORGANIZATION; ECONOMICS; SECONDARY GRADES; POST SECONDARY GRADES

This full-color filmstrip of 79 single frames of its companion manual illustrate and explain the purposes and organization of farmer cooperatives. A farmer cooperative is an incorporated business owned and controlled by member farmers and operated on a cost-of-doing-business basis, where all net earnings or savings are returned to the farmer-patron. This 1- to 2-hour unit, which was designed by college faculty and high school teachers, compares cooperatives to non-cooperative cooperations, relates the types of farmer cooperatives and explains their functions, presents their organizational structure, itemizes some distinctive cooperative characteristics, and explains how they distribute their income. Vocational agriculture students in high schools and junior colleges who are studying this material should be of average ability. Additional resource material is desirable when studying the unit. (DM)

<u>VT 009 320</u>

Thne, Barbara Fundamentals of Equitation: A Color Filmstrip and Syllabus. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for filmstrip and illustrated script). Pub Date nd 24p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*HORSES; LIVESTOCK; STUDENT PROJECTS; \*ANIMAL CARETAKERS; SECONDARY GRADES; POST SECONDARY GRADES

This full-color filmstrip of 86 frames and its companion manual illustrate and explain fundamentals of equitation: (1) Catching the Horse, (2) Manger Knot, (3) Grooming, (4) Saddling, (5) Bridling, (6) Mounting, (7) Seat and Hands, (8) Dismounting, (9) Unsaddling, and (10) Bareback Riding. The filmstrip was designed by college faculty and high school teachers for use in high school and junior college classes of vocational agriculture. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its production. Students should be of average ability. Additional resource information is desirable when studying this topic.

VT 009 321
Birkett, Richard J.
Fat Lamb Project Problems; Color Filmstrip and Illustrated Syllabus. Instructional Materials for Use in Agricultural Education.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for filmstrip and illustrated script). Pub Date nd 22p.

\*SHEEP; \*EXHIBITS; \*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; STUDENT PROJECTS; SECONDARY GRADES; POST SECONDARY GRADES; AGRICULTURAL PRODUCTION; LIVESTOCK; ANIMAL SCIENCE

This full-color filmstrip of 73 frames and its companion illustrated script are designed to present what a vocational agriculture student needs to know to intelligently buy, raise and sell a fat lamb. The development group included college faculty and high school teachers. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its production. Students should be of average ability and at the high school or junior college level. The content includes: (1) selection, (2) feed and care, (3) marketing, (4) show preparation, (5) show day, and (6) exhibition techniques. Additional resource information is desirable when studying this unit. (DM)

VT 009 322

Hyer, Edgar A. Evolution in Marketing Farm Products; A Color Filmstrip and Syllabus. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip). Pub Date nd 15p.

\*MARKETING; \*AGRICULTURAL PRODUCTION; \*VOCATIONAL AGRICULTURE; \*FILMSTRIPS; \*SCRIPTS; POST SECONDARY GRADES; SECONDARY GRADES;

This illustrated manual explains how the present system for marketing agricultural products evolved, beginning with the process of bartering for goods. As towns developed, so did the village market where farmers met with the townspeople to sell their goods. Money facilitated this exchange. Next to develop were the special channels in which marketing specialists took over the marketing function, relieving the farmer of this responsibility and earning for themselves a portion of the sales price. The latest development of the sales price are considered by food chain stores, in which one organization handles the entire process. integrated marketing, characterized by food chain stores, in which one organization handles the entire process from the farmer's field to the housewife's shopping bag. The companion 48-frame full-color filmstrip depicts this story in cartoon fashion. It was developed by college faculty and high school teachers for use in high school and junior college classes of vocational agriculture. Subject matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. Students should be of average ability. Additional resource information is desirable when studying the topic. (DM)



VT 009 323 Vorhies, Ralph Exhibiting Plant Products at the Fair; A Color Filmstrip and Syllabus. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS.

Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip).

Pub Date - nd 14p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*PLANT SCIENCE; \*EXHIBITS; HORTICULTURE; AGRONOMY; SECONDARY GRADES; POST SECONDARY GRADES
\*FAIRS

Teachers and students in high schools and junior colleges may use this illustrated script and accompanying 48-frame filmstrip in vocational agriculture classes. The development group included college faculty and high school teachers. Subject-matter specialists and teachers reviewed the 1 to 2-hour unit prior to its production. The content includes planning for the fair, selection of entries, and preparation of exhibits. Students should be of average ability. Additional resource information is desirable when studying the topic. (DM)

VT 009 324 Fitting and Showing FFA Beef; Color Filmstrip and Illustrated Syllabus. Instructional Materials for Use in Agricultural Education.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.75 for illustrated script and filmstrip).
Pub Date - nd 23p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*LIVESTOCK; \*EXHIBITS; ANIMAL SCIENCE; POST SECONDARY GRADES; \*CATTLE \*BEEF SHOWMANSHIP

Teachers and students in high schools and junior colleges may use this illustrated script and accompanying 71-frame filmstrip in vocational agriculture classes. The development group included college faculty and high school teachers. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. The content includes: (1) pre-show training jobs, (2) preparing the animal's horns, (3) hoof trimming, (4) clipping, (5) washing, (6) grooming, (7) equipment, (8) showmanship, and (9) the show uniform. Students should be of average ability. Additional resource information is desirable when studying the topic. Some equipment which may be demonstrated in the classroom includes: (1) scotch comb, (2) show halter, (3) rope halter, (4) round curry-comb, (5) show stick, (6) big comb, (7) horn weights, (8) rasp, (9) hoof scraper, (10) swipe oil, (11) emary cloth, (12) wood chisel, and (13) a jumbo-sized picture of a beef animal to illustrate technique. (DM)

Wills, Michael; Richard, Herman Fre-Natal Development of the Calf; A Color Filmstrip and Syllabus. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for filmstrip and illustrated script). Pub Date - nd 15p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*ANIMAL SCIENCE; \*CATTLE; SECONDARY GRADES; POST SECONDARY GRADES; LIVESTOCK; DEVELOPMENT; BREEDING \*PRENATAL DEVELOPMENT

Teachers and students of high schools and junior colleges may use this illustrated script and accompanying 50-frame filmstrip in vocational agriculture classes. The development group included college faculty and high school teachers. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its production. The content includes 41 slide frames picturing fetus development, fetus size, and age from conception, and five summary slide frames depicting fetus development and growth. Students should be of average ability. Additional resource information 's desirable when studying the topic. (DM)

VT 009 326
Sankoff, Leo
How to Do a Poultry Autopsy; A Color Filmstrip and Manual. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip). Pub Date - 64 21p.

\*POULTRY; \*ANATOMY; \*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; SECONDARY GRADES; POST SECONDARY GRADES; ANIMAL SCIENCE; VETERINARY MEDICINE

This full-color filmstrip of 67 single frames and its companion illustrated manual demonstrate the proper procedures for conducting a poultry autopsy, from killing methods to final washup and carcass disposal. Detailed photographs show changes in body tissues of birds affected with various sicknesses. Abnormal conditions illustrated include air sac infection, Leukosis Complex, paralysis, coccidiosis, and enteritis. The script may be used as narration for the filmstrip and for later review by students. The unit was developed by college faculty and high school teachers for use in high school and Junior college classes of vocational agriculture. Students should be of at least average ability for this 1- to 2-hour lesson. Additional resource information is desirable when studying the topic. This filmstrip should be shown following the one discussing poultry anatomy (VT 009 308, in this issue). (DM)

175 AIM/WINTER 69

VT 009 327

Delameter, Charles Catching and Handling Poultry; Color Filmstrip and Illustrated Syllabus, Instructional Materials for Use in Agricultural Education.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for filmstrip and illustrated script).
Pub Date - 56 14p. Pub Date -

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*POULTRY; SECONDARY GRADES; POST SECONDARY GRADES; \*ANIMAL CARETAKERS; SUPERVISED FARM PRACTICE

This full-color filmstrip of 39 frames and its companion manual illustrate and explain approved procedures for catching, holding, passing and handling poultry under both floor and commercial cage operation conditions, plus taking a bird from and returning it to a show cage or shipping crate. Use of the catching hook, a long-handled net and a wire catching frame are demonstrated. The content was developed by college faculty and high school teachers for use in high school and junior college classes of vocational agriculture. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. The film-script manual may be taken apart and mounted as a bulletin board or window display and the filmstrip may be used as an interest arouser in starting a unit on poultry. Live birds should be available for practical application of the information in the filmstrip. A suggested lesson plan is included. Students should be of average ability. Additional resource information is desirable when studying the topic. (DM)

VT 009 328
Brannum, Tom
Commercial Beef Cattle Project; Color Filmstrip and Illustrated Syllabus. Instructional Materials for Use in Agricultural Education.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for filmstrip and illustrated script). Pub Date - nd 18p. Pub Date -

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*CATTLE; \*FARM MANAGEMENT; AGRICULTURAL PRODUCTION; POST SECONDARY GRADES; SECONDARY GRADES; LIVESTOCK; ANIMAL SCIENCE

Developed by college faculty and high school teachers, this 64-frame color filmstrip and companion script is for use in high school and junior college vocational agriculture classes. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. The content discusses the selection of good-quality cattle suited to the type of feed available, feeding them properly, and selling them to the best possible advantage by investigating all market outlets before selling. Students should be of average ability. Additional resource information is desirable when studying the topic. (DM)

VT 009 329 Delameter, Charles M Embryo Development of the Chick; A Color Filmstrip and Syllabus. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$3.50 for filmstrip and illustrated script). Pub Date - nd 15p.

\*EMBRYOLOGY; \*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*POULTRY; SECONDARY GRADES; POST SECONDARY GRADES; LESSON PLANS

Developed by college faculty and high school teachers, this 30-frame color filmstrip and accompanying script is for use in classes of vocational agriculture in high schools and junior colleges. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its publication. The slides trace the development of the embryo from conception to hatching. The filmscript manual, in addition to the narration, contains a suggested lesson plan for a unit on embryo development of the chick and a glossary of major terms. Students should be of average ability. Additional resource information is desirable when studying the topic. (DM)

VT 009 333

Tucker, Jeanne Flowers to Wear: Designing for the Occasion, the Costume and the Individual; Beginning Techniques in Corsage Making; Creating Corsages with Glamour.

California State Polytechnic Coll., San Luis Obispo. Dept. of Ornamental Horticulture California State Dept. of Education, Sacramento DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$39.50 for illustrated script and 3 filmstrips). 67 72p. Pub Date -

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*FLORICULTURE; \*ORNAMENTAL HORTICULTURE OCCUPATION; SECONDARY GRADES; POST SECONDARY GRADES; ORNAMENTAL HORTICULTURE \*CORSAGES

Developed by college faculty in cooperation with high school teachers, this illustrated manual and its three Developed by college faculty in cooperation with high school teachers, this illustrated manual and its three companion color filmstrips were designed for use in high school and junior college classes of floriculture. Vocational agriculture teachers will normally use these films with average students to supplement a unit of study. The material was reviewed by teachers and subject-matter specialists prior to and following production. The first filmstrip which has 47 slide frames discusses Designing for the Occasion, the Costume, and the Individual: (1) the corsage, (2) the costume, (3) flowers for corsages, (4) personality of the wearer, and (5) occasions for use. Part Two, Beginning Techniques in Corsage Making contains 101 slide frames discussing: (1) preparation, (2) making the bow, (3) boutonniere, (4) gardenia corsage, (5) pompon mum corsage, and (6) tips to remember. Part Three has 107 slide frames illustrating how to create corsages with glamour: (1) cymbidium orchid corsage, (2) sweetheart rosebud corsage, (3) rosebud and stephonotis corsage, (4) cattleya corsage, (5) foliage corsage, and (6) tips to remember. (DM)



VT 009 334 Sankoff, Leo Poultry Selection and Judging.

California State Polytechnic Coll., San Luis Obispo. Dept. of Poultry Industry California State Dept. of Education, Sacramento DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$14.75 for illustrated script and 2 filmstrips). Pub Date -68 33p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*POULTRY; EVALUATION; ANIMAL SCIENCE; SECONDARY GRADES; POST SECONDARY GRADES

This 2-part illustrated manual and its companion filmstrips were developed by college faculty and high school teachers for use in high school and junior college classes of vocational agriculture. The 1- to 2-hour unit was reviewed by teachers and subject-matter specialists prior to and following completion of production. Part I discusses the basic rules and preparation for judging, necessary skills for judging, how to handle a bird, steps in holding and passing a male, head types on hens, pigmentation, and molting. Part II discusses key points on popular breeds of chickens relating minor and major defects that influence bird selection and judging. Students should be of average ability. Additional resource information is desirable when studying the unit. There are 63 slide frames in Part I and 51 slide frames in Part II. (DM)

VT 009 33

Gibbs, Gordon L. Beef Carcass Judging and Grading; A Color Filmstrip and Syllabus. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS.

Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip). Pub Date nd 37p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*EVALUATION; \*CATTLE; SECONDARY GRADES; POST SECONDARY GRADES; **GRADING** \*CARCASS EVALUATION

This 58-frame color filmstrip on carcass beef evaluation and its accompanying illustrated syllabus was developed to provide a visual aid in teaching meats for the preparation of meat judging teams. The picture sequence was organized to introduce the factors used in judging and grading and then to provide classes for application of organized to introduce the factors used in Judging and grading and then to provide classes for application of these factors. The comments contained in this syllabus were prepared after careful visual observation of slides and a thorough study of the data available on each carcass. The degree of marbling, maturity groups, and federal grades were placed on each carcass by officials of the Federal Grading Service. An official placing is suggested at the end of each judging class. The material was reviewed by teachers and subject-matter specialists. Students of average ability in high school or junior college vocational agriculture classes would Normally spend one or two class periods for viewing the filmstrip and discussion of its contents. The content includes finish evaluation, maturity, confirmation evaluation, and nine classes to judge and grade. Additional resource information is desirable when studying this unit. (DM)

VT\_009\_336

Plant Identification: Annuals, Perennials, and House Plants.

California State Polytechnic Coll., San Luis Obispo. Dept. of Ornamental Horticulture California State Dept. of Education, Sacramento DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$14.95 for illustrated script, filmstrip, and taped narration). 67 45p. Pub Date -

\*FILMSTRIPS; \*SCRIPTS; \*PLANT IDENTIFICATION; \*FLORICULTURE; ORNAMENTAL HORTICULTURE; ORNAMENTAL HORTICULTURE OCCUPATION; TAPE RECORDINGS; SECONDARY GRADES; POST SECONDARY GRADES; \*VOCATIONAL AGRICULTURE; PLANT SCIENCE

Developed for use in high school and junior college classes of vocational agriculture, this illustrated manual and its companion 78-frame color filmstrip with tape narration illustrate 48 annuals, perennials, and house plants to assist students in plant identification. A reference section contains additional information about the plants pictured in the filmstrip. An alphabetical index provides the slide frame number and page number in the manual where the plant is discussed. The material was developed by college faculty and high school teachers and reviewed by teachers and subject-matter specialists prior to and following production. Students should be of at least average ability for this 1- to 2-hour unit in floriculture. Additional resource information is desirable in studying the topic. Additional illustrated manuals are available for \$1.00 each. (DM)

Pautz, Roland Poultry Brooding Management; A Color Filmstrip and Manual. Instructional Materials for Use in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS.

Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip). 65 23p.

\*POULTRY; \*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*FARM MANAGEMENT; AGRICULTURAL PRODUCTION; ANIMAL SCIENCE; SECUNDARY GRADES; POST SECONDARY GRADES

Developed by college faculty and high school teachers, this illustrated manual, which contains a narration for the 70-frame color filmstrip, discusses equipment and procedures for efficient poultry brooding management. The manual and filmstrip were reviewed by teachers and subject-matter specialists prior to and following production. They may be appropriately used in high school or juntor college classes of vocational agriculture with students of average ability for one or two class periods. Topics include brooding systems, types of brooding equipment, brooding preparation, and sanitation procedures for good flock health. Detailed information provided by diagrams and full-color photographs cover such specifics as proper disinfecting methods, the choice of water founts and feeders, and adjustment of brooder temperatures. Recommendations are provided for meeting common poultry brooding problems. Standard textbooks should be used to supplement the information in these instructional aids. (DM)



AIM/WINTER 69

VT 009 338

Brannum, Tom

Beef Cattle, Part I, Castration; A Color Filmstrip and Syllabus. Instructional Materials for Use in Teaching

nd 13p.

California State Polytechnic Coli., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip). Pub Date -

\*VOCATIONAL AGRICULTURE; \*FILMSTRIPS; \*SCRIPTS; \*AGRICULTURAL PRODUCTION; \*CATTLE; ANIMAL SCIENCE; ANIMAL CARETAKERS; LIVESTOCK; SECONDARY GRADES; POST SECONDARY GRADES; VETERINARY MEDICINE \*CASTRATION

Developed by college faculty and high school teachers, this illustrated manual and its companion 40-frame color filmstrip deal with the process of castration as applied to cattle. They were reviewed by teachers and subject-matter specialists prior to and following production. Vocational agriculture teachers may use this subject-matter specialists prior to and following production. Vocational agriculture teachers may use this material in high school or college classrooms for one or two class periods with students of average ability. Illustrated materials in the manual present reasons for castration, difference in cuts and quality of meat of steers and bulls, materials and equipment necessary for performing a Job of castration, and techniques recommended for desired results. Various aspects of this important function in beef production are described: cleanliness and sanitation factors are stressed, methods of proper restraint are characterized, and safety precautions are delineated. Explanations of each step in the operating procedure are fully explained for knife and emasculator castration from the initial approach to follow-up treatment. The burdizzo and elastrator are also illustrated, giving their advantages and proper use. Additional resource information is desirable when studying this topic. (DM)

VT 009 339 Westesen, Gerald L.; Merriam, John L. Introduction to Irrigation.

California State Polytechnic Coll., San Luis Obispo. Dept. of Agricultural Engineering California State Dept. of Education, Sacramento DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 \$7.50 for filmstrip and illustrated script). Oub Date - 68 12p. Pub Date -

\*VOCATIONAL AGRICULTURE; \*FILMSTRIPS; \*SCRIPTS; \*IRRIGATION; \*AGRICULTURAL ENGINEERING; AGRICULTURAL PRODUCTION; AGRONOMY; SECONDARY GRADES; POST SECONDARY GRADES

Vocational agriculture teachers in high schools and junior colleges may use this illustrated manual and companion 34-frame filmstrip with students of average ability. The content was developed by college faculty and high school teachers and reviewed by teachers and subject-matter specialists prior to and following production. Approximately one or two class periods should be allowed for viewing the film and discussion of its contents which include: (1) reasons for irrigation, (2) soil and water relationships, (3) when to irrigate, (4) amount to irrigate, and (5) methods of irrigation. Additional resource information should be utilized in studying this topic. (DM)

VT 009 340

The Food Processing Industry.

California State Polytechnic Coll., San Luis Obispo. Dept. of Food Processing California State Dept. of Education, Sacramento DOCUMENT NOT AVAILABLE FROM EDRS. Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$7.50 for illustrated script and filmstrip). Pub Date -68 13p.

\*FOOD PROCESSING OCCUPATIONS; \*OCCUPATIONAL INFORMATION; \*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; POST SECONDARY GRADES; CAREER OPPORTUNITIES; OCCUPATIONAL GUIDANCE; AGRICULTURAL OCCUPATIONS; SECONDARY GRADES

Developed by college faculty and high school teachers for use in high school and junior college classes of vocational agriculture, this illustrated manual and companion 38-frame color filmstrip was reviewed by teachers and subject-matter specialists prior to and following production. One or two class periods should be allocated for viewing the film and discussion of its contents. The narrative discusses the journey taken by food from the farms and ranches to the tables of consumers. Students should be of average ability. Additional resource information is desirable when studying the topic. (DM)

VT 009 341

Meacham, V.H.
Use of the Level: Setting Up the Instrument; A Color Filmstrip and Manual. Instructional Materials for

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS.

Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip), Pub Date - 65 14p.

\*EQUIPMENT UTILIZATION; \*AGRICULTURAL ENGINEERING; \*VOCATIONAL AGRICULTURE; \*FILMSTRIP; \*SCRIPTS; SECONDARY GRADES; POST SECONDARY GRADES \*SURVEY INSTRUMENTS (ENGINEERING)

The engineering level is used to determine accurate differences in elevation. Some of the applications of this information are discussed in this 41-frame color filmstrip and its companion manual. Subject matter specialists and teachers developed and reviewed the 1- to 2-hour unit prior to its publication. It is for use in high school and junior college classes of vocational agriculture. The content includes: (1) uses of levels, (2) types of levels, (3) care of levels, (4) setting up the tripod, (5) mounting the instruments, (6) leveling the instrument, (7) focusing the level, and (8) using the rod. Students should be of average ability.

Additional resource information is desirable when studying this and the following unit (VT 009 317, in this issue). (DM)

Leach, Richard, And Others The Poultry Industry, A Career with a Future; A Color Filmstrip and Manual.



California State Polytechnic Coll., San Luis Obispo
California State Dept. of Education, Sacramento
DOCUMENT NOT AVAILABLE FROM EDRS.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$5.00 for illustrated script and filmstrip).
Pub Date - 65 24p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*POULTRY; \*OCCUPATIONAL INFORMATION; OCCUPATIONAL GUIDANCE; CAREER OPPORTUNITIES; AGRICULTURAL OCCUPATIONS; SECONDARY GRADES; POST SECONDARY GRADES; ACHIEVEMENT TESTS

This illustrated narrative and its companion 71-frame color filmstrip present occupational information concerning career opportunities in the poultry industry. They were developed by college faculty and high school teachers for use in high school and junior college classes of vocational agriculture. The material was reviewed by teachers and subject-matter specialists prior to and following production. The content provides an overview of the poultry industry: production through marketing, poultry research, poultry feed preparation, disease control, and hatchery operation. A suggested true-false examination is appended. Students should be of average ability for this 1- to 2-hour unit. Supplementary material is desirable to allow students to study the poultry industry in greater depth. (DM)

VT 009 350
Thomson, W.T.; DeVanter, Gordon Van
Pocket Gophers; Habits, Damage and Control. A Color Filmstrip and Syllabus. Instructional Materials for Use
in Teaching Agriculture.

California State Polytechnic Coll., San Luis Obispo DOCUMENT NOT AVAILABLE FROM EDRS.

Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401 (\$4.50 for illustrated script and filmstrip).

Pub Date - nd 17p.

\*FILMSTRIPS; \*SCRIPTS; \*VOCATIONAL AGRICULTURE; \*RODENTICIDES; FARM MANAGEMENT; AGRICULTURAL PRODUCTION; SECONDARY GRADES; POST SECONDARY GRADES \*POCKET GOPHERS; RODENT CONTROL

Developed by college faculty and high school teachers for use in high school and junior college vocational agriculture classes, this illustrated manual and companion 53-frame color filmstrip depict the appearance, habits, burrows, types of damage, and methods of control of the pocket gopher. The manual can be used to provide a preview of the material for the instructor or serve to illustrate the material for individual study by students when it is not desirable to project the filmstrip. Farmers, orchardists, and home gardeners will find suggestions in this material for prompt control measures to utilize when an area is invaded by pocket gophers. Methods of control covered include trapping, poison bait, poison gas, flooding, exclusion, and natural predators. The material was reviewed by teachers and subject-matter specialists prior to and following production. Students should be of average ability for this 1- to 2-hour unit. Additional supplementary material is desirable when studying this topic. (DM)

VT 009 351
Klaustermeyer, James; McGlothlen, Vern
Ground Squirrel Control (Species--Citellus beecheyi beecheyi); Life Habit and Damage and Controls; (Two Parts)

California State Polytechnic Coll., San Luis Obispo
California State Dept. of Education, Sacramento
DOCUMENT NOT AVAILABLE FROM EDRS,
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$13.50 for illustrated script and 2 filmstrips).
Pub Date 68 29p.

\*VOCATIONAL AGRICULTURE; \*FILMSTRIPS; \*SCRIPTS; \*RODENTICIDES; SECONDARY GRADES; POST SECONDARY GRADES; FARM MANAGEMENT; AGRICULTURAL PRODUCTION \*GROUND SQUIRREL CONTROL

This illustrated manual and its two companion filmstrips were designed to aid agriculture techers, county agriculture commissioners, and those interested in vertebrate pest control in teaching the control of ground squirrels. They were developed by college faculty and high school teachers and reviewed prior to final production. The target audience includes high school and junior college classes in vocational agriculture. Approximately one or two class periods should be allocated for viewing and discussion of the contents, which include: (1) Life Habit and Damage, a filmstrip of 27-slide frames discussing the life habits and the correct times for attempts at control, and (2) Ground Squirrel Control, a filmstrip of 51-slide frames discussing the four control methods of poison gases (fumigants), poison baits, trapping, and exclusion. Correct application of each control method is discussed. Students should be of average ability. (DM)

VT 009 390 Todd, John D. Electrical Wiring.

Tennessee Univ., Knoxville. Dept. of Agricultural Education
MF AVAILABLE IN VT-ERIC SET.
Department of Agricultural Education, University of Tennessee, 308 Morgan Hall, Knoxville, Tennessee 37916 (no charge).
Pub Date - Aug69 79p.

\*TEACHING GUIDES; \*VOCATIONAL AGRICULTURE; \*AGRICULTURAL ENGINEERING; \*ELECTRICITY; ELECTRICAL CIRCUITS; ADULT FARMER EDUCATION; SECONDARY GRADES; YOUNG FARMER EDUCATION; FARMERS; TRANSPARENCIES; LABORATORY EXPERIMENTS; \*FARM STRUCTURES

Designed for teacher use, this publication includes a suggested procedure and subject content for teaching electrical wiring to high school and adult classes in vocational agriculture. Selected parts of the reference may be reproduced for use by students as laboratory exercises and for use by teachers as transparencies. The content includes: (1) teaching outline, (2) equipment and supplies needed, (3) safety precautions, (4) wiring simple circuits, (5) wiring of an electrical installation, (6) planning for electrical wiring, (7) planning for circuit arrangement of farm buildings, (8) different types of circuits needed, (9) planning the wiring layout for a building, and (10) figuring the cost of electrical service. Teachers should have some experience in electrical wiring and a background knowledge of electrical principles. Part of the content could be taught in the basic vocational agriculture courses and the rest in more specialized courses. The material may be taught as a 1-semester course or in smaller, more concise units requiring 1 to 8 weeks per unit. (DM)



VT 009 565 Hoover, Norman, And Others Supervised Occupational Experience in Agriculture; Plans and Records.

DOCUMENT NOT AVAILABLE FROM EDRS. French-Bray Printing Company, Candler Building, Baltimore, Maryland 21202 (Minimum of 3 copies: \$1.00, postage prepaid).
Pub Date - 69 34p.

\*COOPERATIVE EDUCATION; RECORDS (FORMS); \*STUDENT PROJECTS; \*VOCATIONAL AGRICULTURE; \*WORKBOOKS; \*OFF FARM AGRICULTURAL OCCUPATIONS; SECONDARY GRADES; BOOKKEEPING

This record book was designed to assist the student and his vocational agriculture teacher in planning and conducting a program of cooperative occupational experience. It should supplement the class instruction and guide the student in attaining his objectives. The book provides space for: (1) describing the places where the student works, (2) recording the kinds of experiences planned, (3) recording details of the employment agreement, (4) recording occupational experiences by months, and (5) keeping records of accomplishments. Records of agricultural production experiences should be kept in a separate book. A related teaching guide for guiding the student utilization of this workbook is announced as VT 008 783 (AIM Fall 1969). (DM).

VT 009 566 Ridenour, Harlan E. Weed Control, Cultural and Chemical.

Ohio State Dept. of Education, Columbus. Agricultural Education Service
Ohio State Univ., Columbus. Dept. of Agricultural Education
MF AVAILABLE IN VT-ERIC SET.
Ohio Vocational Agriculture, Instructional Materials Service, The Ohio State University, 2120 Fyffe Road, Columbus, Ohio 43210 (\$1.50).
Pub Date - 69 113p.

\*SUPPLEMENTARY TEXTBOOKS; \*VOCATIONAL AGRICULTURE; \*WEEDS; \*AGRICULTURAL CHEMICAL OCCUPATIONS; \*HERBICIDES; STUDY GUIDES; AGRONOMY; PLANT SCIENCE; AGRICULTURAL PRODUCTION; SECONDARY GRADES; POST SECONDARY EDUCATION; FARMERS; PLANT IDENTIFICATION; AGRICULTURAL SAFETY

The purpose of this manual is to provide information for students to study the extent and nature of the weed problem, learn more about the growth habit of weeds, examine the various methods of control, review safety practices, and apply his knowledge by recommending weed control programs for actual farm conditions. The practices, and apply his knowledge by recommending weed control programs for actual farm conditions. The manual was developed by curriculum specialists, working with agronomists, for use in high school or adult farmer production agriculture classes. Students should be interested in farming or an agricultural chemical farmer production agriculture classes. Students should be interested in farming or an agricultural chemical occupation as a career. Teachers should be competent in production agriculture. The content includes chapters on: (1) Why Should We Control Weeds, (2) Classification, Identification, and Spreading of Problem Weeds, (3) on: (1) Why Should We Control Weeds, (2) Classification, Identification, and Spreading of Problem Weeds, (3) Methods of Controlling Weeds, (4) How Herbicides are Used, (5) Safety in Using Herbicides, (6) Herbicide Application Equipment, and (7) What Weed Control Program Should You Follow? The textual material is Application Equipment, and (7) What Weed Control Program Should You Follow? The textual material is all ustrated with tables, line drawings, and photographs. A glossary of weed control terms is appended. Transparency masters to accompany this manual are available from the publisher. (DM)

VT 009 567
Plows and Plowing.

Ohio State Dept. of Education, Columbus. Agricultural Education Service
Ohio State Univ., Columbus. Dept. of Agricultural Education
MF AVAILABLE IN VT-ERIC SET.
Agdex 741
Ohio Vocational Agriculture, Instructional Materials Service, The Ohio State University, 2120 Fyffe Road, Columbus, Ohio 43210 (\$1.75).
Pub Date - 69 131p.

\*SUPPLEMENTARY TEXTBOOKS; \*VOCATIONAL AGRICULTURE; \*AGRICULTURAL ENGINEERING; \*FARM MECHANICS (OCCUPATION); \*AGRICULTURAL MACHINERY; ADULT FARMER EDUCATION; YOUNG FARMER EDUCATION; SECONDARY GRADES; AGRICULTURAL MACHINERY OCCUPATIONS; FARMERS; AGRICULTURAL PRODUCTION; EQUIPMENT MAINTENANCE; EQUIPMENT UTILIZATION \*PLOWS; PLOWING

Developed by curriculum specialists working with engineers, this manual is intended to assist high school and adult students of vocational agriculture in becoming better plowmen. It describes the various types of plows, the function and design of plow parts, and provides suggestions for operation, maintenance, and repair of plows. Textual information is arranged under headings of: (1) Plows and Plowing, (2) Design of the Plow Bottom, plows. Textual information is arranged under headings of: (1) Plows and Plowing, (5) Hitching the Moldboard (3) Maintenance of the Moldboard Plow, (4) Forces Acting Upon the Moldboard Plow, (5) Hitching the Moldboard Plow, (6) Principles of Hitching the Tractor, (7) Hitching the Drawn (Pull Type) Plow, (8) Hitching the Plow, Integral-Mounted and Semi-Integra! Mounted Plows, (9) Adjusting Attachments for Efficient Operation, and (10) Integral-Mounted and Semi-Integra! Mounted Plows, (9) Adjusting Attachments for Efficient occupations and Field Adjusting the Plow. Students should be interested in farming or agricultural machinery occupations and teachers should be competent in production agriculture or agricultural mechanics. In addition to this manual, plows and operators manuals should be available for practical application of the information. (DM)

VT 009 568 Oliver, Craig S. Landscaping the Home Grounds.

Ohio State Dept. of Education, Columbus. Agricultural Education Service
Ohio State Univ., Columbus. Dept. of Agricultural Education
MF AVAILABLE IN VT-ERIC SET.
Agdex 272
Ohio Vocational Agriculture, Instructional Materials Service, The Ohio State University, 2120 Fyffe Road, Columbus, Ohio 43210 (slide series and script, \$21.00).
Pub Date - 69 46p.

\*LANDSCAPING; \*VOCATIONAL AGRICULTURE; \*SLIDES; \*SCRIPTS; SECONDARY GRADES; DESIGN; SITE ANALYSIS; FAMILY ENVIRONMENT; \*ORNAMENTAL HORTICULTURE OCCUPATION

This slide series and companion script was developed to assist students in understanding the basic elements of landscape design. The entire series contains 130 color slides and is divided into four parts: (1) Introduction to Design, 24 slides, (2) Site Analysis, 26 slides, (3) The Public Area, 40 slides, and (4) The Private Area, 40 slides. The script contains brief introductory and concluding remarks for each of the four sections. A site analysis check sheet suitable for reproduction is included at the close of Part 2. The content is closely correlated with the teaching guide, "Landscaping Your Home" (ED 017 675, RIE August 1968; VT 002 932, AIM Summer 1968). Teachers should be competent in vocational horticulture and the high school students should have an occupational interest in landscaping. The material may be used in the midwest United States for teacher or individual student study. (DM)



VT 009 569
Bruner, W.H.; VanStavern, B.D.
Appraising Market Hogs for Carcass Merit.

Ohio State Dept. of Education, Columbus. Agricultural Education Service
Ohio State Univ., Columbus. Dept. of Agricultural Education
MF AVAILABLE IN VT-ERIC SET.
Ohio Vocational Agriculture, Instructional Materials Service, The Ohio State University, 2120 Fyffe Road,
Columbus, Ohio 43210 (document and slides, \$4.75).
Pub Date - 69 12p.

\*SWINE; \*SLIDES; \*VOCATIONAL AGRICULTURE; \*FARMERS; \*FOOD PROCESSING OCCUPATIONS; MEAT; EVALUATION; POST SECONDARY EDUCATION; SECONDARY GRADES; ANIMAL SCIENCE; AGRICULTURAL PRODUCTION

Developed by meat and swine science specialists, this color slide series and companion script was designed to assist high school and adult vocational agriculture students in learning to appraise market hogs for carcass value. Live hogs of the appropriate grades were obtained, photographed, and slaughtered. The carcass and selected cuts were photographed and the cut-out data were determined in the meat laboratory. The 30 slides may be used in many ways: (1) complete series, for general information, (2) on-hoof slides, for general information, (3) carcass slides, for carcass judging, and (4) cross-sectional slides, for wholesale cut judging. Teachers should be competent in production agriculture. An appropriate reference for student study is Leaflet 139, "Appraising Market Hogs for Carcass Merit," Cooperative Extension Service, The Ohio State University, by the same authors. (DM)

VT 009 610
Plank, Harry; Bloss, Norman
Office Procedures Used in the Agricultural Services.

Ohio State Univ., Columbus. Dept. of Agricultural Education
Ohio State Dept. of Education, Columbus. Agricultural Education Service
MF AVAILABLE IN VT-ERIC SET.
Ohio Vocational Agriculture, Instructional Materials Service, The Ohio State University, 2120 Fyffe Road,
Columbus, Ohio 43210 (\$1.25).
Pub Date - 69 89p.

\*AGRICULTURAL SUPPLY OCCUPATIONS; \*VOCATIONAL AGRICULTURE; \*ACHIEVEMENT TESTS; \*WORKBOOKS; \*OFFICE MANAGEMENT; GRADE 11; GRADE 12; ANSWER KEYS; SUPPLEMENTARY TEXTBOOKS; BUSINESS EDUCATION; INDIVIDUALIZED INSTRUCTION

This manual is designed for use by students working as office clerks in agricultural businesses. The record-keeping procedures outlined have been verified by use. Records are important for financial purposes, tax records, and management decisions. The following activities are covered: (1) Sales Tickets, (2) Accounts Receivable Records, (3) Purchase Orders, (4) Perpetual Inventory, (5) Sales Tax, (6) Discounts, (7) Daily Cash Balance, (8) Monthly Bank Balance, and (9) Grain Accounts. A 1-month problem provides a listing of the daily business transactions for which the student should complete all the necessary bookkeeping entries for the entire month. Necessary business forms are appended. A test and answer supplement is available for \$2 which contains the quizzes and answers to the student workbook problems. This 1-semester course should be used with students interested in an occupation in feed and grain and related businesses. This is a revision of an earlier document announced as ED 012 783 (RIE January 1968) and VT 001 879 (AIM Spring 1968). (DM)



BUSINESS AND OFFICE EDUCATION SECTION



182

VT 001 577
Business Law for High Schools. Curriculum Bulletin No. 2, 1966-67 Series.

New York City Board of Education, N.Y. MF AVAILABLE IN VT-ERIC SET. Pub Date - 67 80p.

\*TEACHING GUIDES; \*CURRICULUM GUIDES; \*BUSINESS EDUCATION; SECONDARY GRADES; BIBLIOGRAPHIES; \*LAW INSTRUCTION \*BUSINESS LAW

Developed by a local committee, this guide is for teacher use in planning a course for high school students in business law. The content objectives are to develop an understanding of law, its meaning and development, making a contract, buying and selling goods, and supplementary principles. An outline is contained for a 1-term course in Business Law I and a 1-term course in Business Law II. Students who complete both terms should be adequately prepared for the regents examination in the state of New York. A bibliography which includes reference books for students and teachers and a legal vocabulary are appended. (CH)

VT 003 598 Office and Business Practices. Career Guidance Series. Curriculum Bulletin No. 3c, 1967-68 Series.

New York City Board of Education, N.Y. MF AVAILABLE IN VT-ERIC SET. Pub Date - 67 159p.

\*TEACHING GUIDES; \*BUSINESS EDUCATION; \*OFFICE PRACTICE; \*OCCUPATIONAL GUIDANCE; ILLUSTRATIONS; OFFICE MACHINES; BUSINESS SKILLS; BUSINESS RESPONSIBILITY; EMPLOYMENT OPPORTUNITIES; WORK ATTITIDES

This guide is for teacher use in planning a course in office and business practices as part of a career guidance program. A total of 60 lesson plans are presented in four units. Unit 1, Your Attitudes Are Showing, presents important rules in conduct that relate to living and working in our modern society. Unit 2, Earn While You Learn, focuses on opportunities to learn the basic skills needed to obtain and hold various part-time jobs and to handle earnings wisely. Unit 3, You and Your Rights, provides practical information about installment buying, contracting loans, use of negotiables, and computing interest rates. Unit 4, Business Machines, introduces pupils to the various types of office machines commonly used in business and gives training in basic skills required for operating the 10-key adding machine, the spirit duplicator, and the comptometer. The guide is illustrated and contains examples of pupil work sheets. (CH)

VT 004 028 You and the Computer, A Student's Guide.

General Electric Co., Schenectady, N.Y. Educational Publications
MF AVAILABLE IN VT-ERIC SET.
Educational Communications, General Electric Company, 570 Lexington Avenue, Room 801, New York, New York 10022 (\$7.00 per 100).
Pub Date - 65 22p.

\*SUPPLEMENTARY TEXTBOOKS; \*BUSINESS EDUCATION: \*COMPUTERS: SECONDARY GRADES: COLLEGE FRESHMEN

This booklet is for use by secondary school students or college freshmen as an introduction to computers. It was prepared by a computur manufacturer. Unit titles are (1) The Computer Age, (2) The Computer's Amazing Capacity, (3) The Computer Works the Same Way You Do, (4) Programming, (5) The BinarCode, (6) Symbolic Languages, (7) Computer Memory, (8) The Computer in Operation, (9) How You Talk to the Computer, and (10) Computer Hardware. Illustrations are photographs and line drawings.(EM)

VT 006 396 Office Machines for High Schools.

New York City Board of Education, N.Y. Bureau of Curriculum Development
MF AVAILABLE IN VT-ERIC SET.
No. 18
Publications Sales Office, Board of Education of the City of New York, 110 Livingston Street, Brooklyn, New York 11201 (\$3.00).
Pub Date - 66 145p.

\*TEACHING GUIDES; \*CURRICULUM GUIDES; \*BUSINESS EDUCATION; \*OFFICE MACHINES; GRADE 11; GRADE 12; SECONDARY GRADES; TEACHING TECHNIQUES

This guide is for teacher use in planning a course for 11th and 12th grade pupils in office machines. It was developed, tested, and revised by a local curriculum commîttee. The content objectives are to develop understanding of general methods and techniques, 10-key adding machine, full-keyboard adding machine, rotary calculator, printing calculator, key-driven calculator, and bookkeeping machine. The instructional time allotment and student prerequisites should be determined based upon the curriculum pattern of each school. Suggestions concerning supplies, textbooks for classroom use, and visual aids are appended. (CH)

VT 006 670 Business Communication.

Rochester City School District, N.Y. Curriculum Office MF AVAILABLE IN VT-ERIC SET. Pub Date - 63 71p.

\*CURRICULUM GUIDES; GRADE 12; \*BUSINESS EDUCATION; \*LESSON PLANS; \*COMMUNICATION SKILLS; SECRETARIES; GRADE 11; \*STENOGRAPHERS

This syllabus was prepared by teachers from results of industrial surveys, and is designed for use by high school business teachers in planning and conducting lessons in business communications. The content objective is to aid 11th and 12th grade secretarial-stenographic students in developing the communications skills necessary for employment. Units on oral and written communication, word mastery, business writing, business letters, other types of written business communications, and development of competence in oral communications are covered. Each unit presents a statement of purpose, content to be studied, suggested procedures and activities, and space for teacher comments. Resource materials are listed at the end of each unit. An appendix includes a list of available published English tests, sample practice drills, and a listing of sources supplying free clerical skills tests. The 1-semester course should be conducted by certified business teachers. (AW)



VT 006 745 Data Processing I.

Rochester City School District, N.Y. MF AVAILABLE IN VT-ERIC SET. Pub Date - 64 43p.

\*CURRICULUM GUIDES; \*BUSINESS EDUCATION; \*DATA PROCESSING; \*DATA PROCESSING OCCUPATIONS; GRADE 11; GRADE 12

This material was prepared by a committee of teachers from results of industry surveys and information supplied by individual businessmen. It is designed for use by business teachers in lesson planning for data processing courses in high schools and vocational schools. The primary objective of such courses is to help 11th and 12th grade students in developing a knowledge of the basic principles of automatic data processing. Eleven units cover: (1) Meaning of Data Processing, (2) Automated Data Processing, (3) Input Media, (4) Automatic Wiring, (5) Card Punching and Verifying, (6) Sorting and Selecting, (7) Interpreting, (8) Matching, Merging, Selection and Sequence Checking, (9) Reproducing, Gang Punching, and Mark-Sensed Punching, (10) Detail Printing, Group Printing, and Adding, and (11) Introduction to Computers. Each unit contains a statement of purpose, content to be studied, teaching suggestions, vocabulary list, and resource materials. Teaching materials recommended for each unit and a list of necessary data processing equipment are appended. The instructor should be a certified business teacher with background in data processing. The recommended time allotment for the course is 160 hours for a high school program, and 400 hours if taught in a vocational center. (AW)

VT 007 235
Business Information Systems; Course Outline. Technical, Vocational and Semiprofessional Studies.

Miami-Dade Junior College, Fla. Dept. of Business Information Systems MF AVAILABLE IN VT-ERIC SET.
Pub Date - 68 77p.

\*CURRICULUM GUIDES; \*BUSINESS EDUCATION; \*INFORMATION SYSTEMS; \*DATA PROCESSING OCCUPATIONS; POST SECONDARY EDUCATION; JUNIOR COLLEGES; BIBLIOGRAPHIES; ASSOCIATE DEGREES; INTERNSHIP PROGRAMS

This curriculum guide is for use in planning a 2-year course for post-secondary students studying business information systems in Junior colleges. The guide contains outlines for eight courses: (1) Theory of Business Information Systems, (2) Data Capture Theory, (3) Data Capture Equipment, (4) Machine Accounting Systems and Procedures, (5) Basic Calculator Functions, (6) Systems Analysis and Design, (7) Computerized Business Problems, and (8) Internship Program. Each guide contains an introduction, a table of contents, instructional objectives, unit outlines, suggestions for teaching methods, student activities, instructional materials, student evaluation, and a bibliography. A program outline for a 2-year Associate in Science degree in business information systems is included. (CH)

VT 007 692

IBEA Handbook for Teachers of Office Procedures.

Illinois Business Education Association, Chicago MF AVAILABLE IN VT-ERIC SET. Pub Date - 68 237p.

\*TEACHING GUIDES; \*BUSINESS EDUCATION; \*OFFICE PRACTICE; SECONDARY GRADES; ILLUSTRATIONS; TRANSPARENCIES; SUPERIOR STUDENTS; AVERAGE STUDENTS; SLOW LEARNERS; UNITS OF STUDY (SUBJECT FIELDS)

This guide is for teacher use in planning courses for high school students in office procedures (secretarial, clerical or office practice). It was developed and tested in the classroom by experienced teachers of office education. The content objective is to provide adequate information for class presentation of selected units which usually are not adequately treated in textbooks and units on new equipment and procedures. The introductory unit gives an overall view of two plans for teaching office procedures courses. The other units present specific topics, including: (1) Office Simulation, (2) Data Processing, (3) The Executive Typewriter, (4) Job Orientation and Advancement, (5) Mailing Unit, (6) The Office Copier, (7) Office Organizational Pattern, and (8) Offset Duplicating. To facilitate classroom use, the units contain activities for launching, developing, and culminating the unit. These activities are rated for three levels of student ability: A for the fast learner, B for the average learner, and C for the slow learner. Illustrations may be reproduced as overhead transparencies or other instructional materials. (CH)

VT 007 777
Houghton, W.F., And Others
Training for Office Supervision. A Report by the Commercial and Clerical Training Committee of the Central Training Council.

Ministry of Labor, London (England). Central Training Council DOCUMENT NOT AVAILABLE FROM EDRS.
Sales Section, British Information Service, 845 Third Avenue, New York, New York 10022 (\$.25). Pub Date - 68 36p.

\*SUPERVISORY TRAINING; \*CLERICAL WORKERS; PROGRAM DEVELOPMENT; CURRICULUM; \*PROGRAM EVALUATION; \*FOREIGN COUNTRIES; JOB ANALYSIS; RECORDS (FORMS) ENGLAND

Improving the quality of office supervision through the establishment of a systematic and rational training policy is discussed. Four essential stages are given for the development of company training programs: (1) Define the role and responsibilities of the supervisor, utilizing job analysis techniques, (2) The responsible manager should identify points of strength and weakness in the supervisor's performance and prepare training specifications, (3) The company must decide how the various training needs can be met, which involves the determination of training methods and planning a program, and (4) It is essential to evaluate the training given to see whether the supervisor's performance has reached the required standard. Examples of a job specification sheet, training appraisal form, and the two course outlines are appended. (CH)

VT 007 975
Suggested Curriculum Guide for: Secretarial.

Arizona State Dept. of Vocational Education, Phoenix MF AVAILABLE IN VT-ERIC SET.
Pub Date - Jun68 122p.

\*CURRICULUM GUIDES; \*CURRICULUM PLANNING; \*OFFICE OCCUPATIONS EDUCATION; \*SECRETARIES; BUSINESS EDUCATION; SECONDARY GRADES; POST SECONDARY EDUCATION; \*OFFICE PRACTICE



One of a series concerned with an office education occupational cluster, this curriculum guide is primarily for use by vocational high school or junior college teachers in planning courses and lessons for a secretarial office practice block. Developed by a state committee of teachers and supervisors, the guide is based on 360 class hours per school year. Contents provide information on integrated projects, simulated activities, and model office activities, and include special sections dealing with the use of the dictation-transcription laboratory and use of student profiles. Major units, each containing a statement of objectives, information on course content, suggested classroom activities, related materials, evaluation suggestions, and special reference materials, cover: (1) orientation, (2) shorthand-transcription, (3) typewriting, (4) indexing, fliing, and record keeping, (5) machine transcription, (6) duplication, (7) business machines, (8) information sources, (9) communications, (10) financial activities, (11) data processing, (12) transportation, and (13) job application and interview. The teacher should be a subject matter specialist with a bachelor's degree, and students should be 16 to 18 years old, in grades 10 to 14, and have completed several business courses as prerequisites. Other documents in the series are VT 007 976, VT 007 977, and VT 007 978, all in this issue of AIM. (AW)

VT 007 976
Suggested Curriculum Guide for: Clerical.

Arizona State Department of Vocational Education, Phoenix MF AVAILABLE IN VT-ERIC SET.
Pub Date - Jun68 84p.

\*CURRICULUM GUIDES; \*OFFICE OCCUPATIONS EDUCATION; \*CLERICAL OCCUPATIONS; \*CURRICULUM PLANNING; \*BUSINESS EDUCATION; SECONDARY SCHOOLS; POST SECONDARY EDUCATION

One of a series relating to an office education occupational cluster, this curriculum guide is intended primarily for use by vocational high school or junior college teachers in planning courses and lessons for a clerical block. Developed by a state committee of teachers and supervisors, the guide is based on 360 class hours per school year. Most of the 15 units of instruction contain a statement of objectives, suggested content, classroom activities, related materials, and evaluation suggestions. Student profiles for the various units and a separate statement on individual needs and simulated practices are also provided. Unit topics are: (1) Orientation, (2) Office Management, (3) Office Mathematics, (4) Financial Activities, (5) Oral and Written Communication, (6) Office Machines, (7) Records Management, (8) Transportation, (9) Machine Transcription, (10) Data Processing, (11) Typewriting Production, (12) Using Sources of Information, (13) Duplicating Machines, (14) Job Application, and (15) Individual Needs and Simulated Practices. The course teacher should be a subject matter specialist in office occupations with a bachelor's degree, and students should be 16 to 18 years old, in grades 10 to 14, and should have completed several business courses as prerequisite training. Other documents in the series are VT 007 975, VT 007 977, and VT 007 978, all in this issue of AIM. (AW)

VT 007 977
Suggested Curriculum Guide for: Cooperative Office.

Arizona State Department of Vocational Education, Phoenix MF AVAILABLE IN VT-ERIC SET.
Pub Date - Jun68 60p.

\*CURRICULUM GUIDES; \*OFFICE OCCUPATIONS EDUCATION; \*BUSINESS EDUCATION; \*COOPERATIVE EDUCATION; \*CURRICULUM PLANNING; SECONDARY GRADES; POST SECONDARY EDUCATION

One of a series relating to an office education occupational cluster, this curriculum guide is intended primarily for use by vocational high school or junior college teachers in planning courses and lessons in cooperative office education. Developed by a state Committee of teachers and supervisors, the guide is based on 180 hours of class time plus 450 hours of on-the-job training. Contents include nine instructional units giving a statement of objectives, information on content, suggested classroom activities, related materials, and recommended hours per unit. Suggested evaluations are itemized and student profiles are given for the unit topics of: (1) Orientation, (2) Preparation for Interview and Application, (3) Human Relations, (4) Communications, (5) Financial Responsibility, (6) Filing, (7) Introduction to Automated Data Processing, (8) Development of Clerical Skills, and (9) In-School Instruction Related to Job. The course instructor should be a subject matter specialist in office occupations with a bachelor's degree, and students should be 16 to 18 years old, in grades 10 to 14, and have completed several business courses as prerequisite training. Other documents in the series are VI 007 975, VI 007 976, and VI 007 978, all in this issue of AIM. (AW)

VT 007 978
Suggested Curriculum Guide for: Vocational Office Procedures.

Arizona State Department of Vocational Education, Phoenix MF AVAILABLE IN VT-ERIC SET.
Pub Date - Jun68 70p.

\*CURRICULUM GUIDES; \*CURRICULUM PLANNING; \*OFFICE PRACTICE; \*BUSINESS EDUCATION; \*OFFICE OCCUPATIONS EDUCATION; SECONDARY GRADES; POST SECONDARY EDUCATION

One of a series concerned with an office educational occupational cluster, this curriculum guide is primarily for use by vocational high school or Junior college teachers in planning courses and lessons in vocational office procedures. Developed by a state committee of teachers and supervisors, the guide is based on 180 class hours per school year. Units of instruction containing information on content, suggested classroom activities, related materials, evaluation suggestions, statement of objectives, and recommended time allotment for each unit cover: (1) General Orientation for an Office Career, (2) Personal Qualities for an Office Career, (3) Communications, (4) Office Equipment, (5) Financial Activities, (6) Records Management, (7) Transportation, (8) Supplies, (9) Using Sources of Information, (10) Automated Data Processing, and (11) Applying for a Job and the Job Interview. Supplementary materials include films, pamphlets, and charts. A subject matter specialist in office occupations with a bachelor's degree should teach the course. Students should be 16 to 18 years old, in grades 10 to 14, and should have taken several business courses as prerequisite training. Other documents in the series are VT 007 975, VT 007 976, and VT 007 977, all in this issue of AIM. (AW)

VT 008 130
Boynton, Paul M., Ed.
Connecticut Business Education Handbook. Bulletin No. 43.

Connecticut State Dept. of Education, Hartford MF AVAILABLE IN VT-ERIC SET. Pub Date - Sep66 245p.



\*BUSINESS EDUCATION; OFFICE OCCUPATIONS EDUCATION; \*STATE CURRICULUM GUIDES; SECONDARY GRADES; SALESMANSHIP; BIBLIOGRAPHIES; AUDIOVISUAL AIDS; CONSUMER EDUCATION; TEACHING METHODS; ECONOMICS

Developed by the State Advisory Committee on Business Education and business teachers working on 19 subject matter committees in their respective fields, this curriculum guide is presented in 19 chapters: (1) Bookkeeping I, (2) Bookkeeping II, (3) Business Arithmetic, (4) Business English, (5) Business Law, (6) Clerical Practice I and II, (7) Consumer Education, (8) Data Processing, (9) Economic Geography, (10) Economics, (11) General Business, (12) Office Machines, (13) Office Practice, (14) Personal Typewriting, (15) Salesmanship, (16) Stenography I, (17) Stenography II and Transcription, (18) Typewriting I, and (19) Typewriting II. Each chapter includes a content outline as well as sections relating to such matters as placement in the curriculum, course description, objectives, teaching suggestions, testing, student achievement recognition, and suggested instructional materials. Photographs illustrate the text. (JK)

VT 008 134
Hartzler, F.E., And Others
Programmed Text on Orientation to an Office Education Program.

Kansas State Teachers Coll., Emporia
Kansas State Board for Vocational Education, Topeka
MF AVAILABLE IN VT-ERIC SET.
Kansas State Teachers College, Emporia, Kansas 66801 (\$2.50).
Pub Date - nd 85p.

\*PROGRAMED TEXTS; \*BUSINESS EDUCATION; \*OFFICE OCCUPATIONS EDUCATION; SECONDARY GRADES; \*PROGRAM DESCRIPTIONS

The programed text is designed to aid high school students in acquiring a basic understanding of the office education program. Developed under direction of a teacher-trainer, the manual provides a brief explanation of the program, instructions to the student for using the text, and nine sections set up in a programed question and answer format covering: (1) Introduction, (2) Terminology, (3) Advantages of the Program, (4) Operation of the Program, (5) Related Training, (6) Regulations, (7) Grooming, (8) On-the-Job Relationships, and (9) Summary. A bibliography is included, and the text is illustrated with numerous line drawings. (AW)

VT 008 374
Bingham, V.N.
A Training Officer's Guide to Commercial Apprenticeship. BACIE Training Manual No. 3.

British Association for Commercial and Industrial Education, London (England)
DOCUMENT NOT AVAILABLE FROM EDRS.
British Association for Commercial and Industrial Education, 26a Buckingham Palace Road, London, S.W. 1,
England.
Pub Date - Feb68 38p.

\*BUSINESS EDUCATION; \*APPRENTICESHIPS; TEACHING GUIDES; \*PROGRAM GUIDES; \*FOREIGN COUNTRIES; \*EDUCATIONAL PROGRAMS; ADULT VOCATIONAL EDUCATION; BIBLIOGRAPHIES ENGLAND

Resource material is presented for commercial apprenticeships, one of the key areas of vocational training in England. Following a review of the historical development of commercial apprenticeships an analysis of company needs for general and specific professional skills is discussed, including: (1) the company profile, (2) manpower planning, (3) assessment of resources, (4) company structure, and (5) revision and updating. Commercial apprenticeship programs are of two types: commercial apprenticeships for the 16 year old entrant, and student apprenticeships for the 18 year old entrant. The minimum qualifications and organizational scheme are presented for these two programs. Three main responsibilities of the training officer are: to arrange with a college or university for a suitable program of further education, to plan and control the work and office training of the apprentice, and to insure sufficient correlation between the program and individual ability. Also discussed are a variety of certificated commercial programs. A bibliography is appended. (CH)

VT 008 839
Guide Syllabus for the Training of Administrative and Commercia? Trainees.

Iron and Steel Industry Training Board, London (England) MF AVAILABLE IN VT-ERIC SET.
Pub Date - May68 14p.

\*CURRICULUM GUIDES; \*BUSINESS ADMINISTRATION; \*OFFICE OCCUPATIONS; ADMINISTRATIVE PERSONNEL; \*INDUSTRIAL PERSONNEL; ADULT VOCATIONAL EDUCATION; \*SUPERVISORY TRAINING

This syllabus is intended to aid in designing training programs for administrative personnel in the iron and steel industry. Prepared by the Iron and Steel Industry Training Board, the recommendations present a comprehensive course of practical training primarily designed to acquaint trainees with the interrelationships of administration, systems, and specific job knowledge. The content briefly summarizes the main principles and subject areas to be covered, and gives the suggested training and working time to be spent on each. Areas covered include: (1) administrative duties and responsibilities, (2) purchasing, (3) planning, progress, and control, (4) distribution, shipping, and transport, (5) accounting and costing, (6) home and export sales, and (7) finance. The 2-year program is a supplement to VT 008 840 (in this issue). (AW)

VT 008 840 Recommendations on Commercial and Clerical Training.

Iron and Steel Industry Training Board, London (England) MF AVAILABLE IN VT-ERIC SET. Pub Date - 67 9p.

\*PROGRAM DESCRIPTIONS; \*BUSINESS EDUCATION; \*OFFICE OCCUPATIONS; INDUSTRIAL PERSONNEL; ON THE JOB TRAINING; ADULT VOCATIONAL EDUCATION; OCCUPATIONAL INFORMATION ENGLAND

Prepared by the Iron and Steel Industry Training Board, this bulletin augments earlier training recommedations for commercial and clerical employees in the industry. The booklet contains objectives, a definition of each level of trainee position, and elements considered necessary for an effective training program. Trainee positions described are: (1) clerical, (2) secretaries, typists, and office machine operators, (3) commercial and administrative, and (4) graduate. Brief descriptive information on induction training, practical training, and further education for all levels is given. A related document is VT 008 839 (in this issue). (AW)

VT 008 910 Bookkeeper II.

Stanislaus County Multi-Occupational Adult Training Project, Modesto, Calif. MF AVAILABLE IN VT-ERIC SET. Modesto Junior College, College Avenue, Modesto, California 95350. Pub Date - nd 12p.

\*PROGRAM DESCRIPTIONS; PROGRAM DEVELOPMENT; PROGRAM EVALUATION; \*BOOKKEEPING; \*ADULT VOCATIONAL EDUCATION; \*BUSINESS EDUCATION; VOCATIONAL FOLLOWUP; CURRICULUM GUIDES; PROGRAM GUIDES \*BOOKKEEPERS; STANISLAUS COUNTY; MULTI-OCCUPATIONAL ADULT RETRAINING PROJECT; MODESTO; CALIFORNIA

To prepare adult trainees for employment as bookkeepers, this program was developed by the supervisor of the Modesto Junior College business training section and modified and enlarged to meet the needs and capabilities of the students. Included in the 840-hour course were two field trips and 1 to 4 weeks of cooperative work experience. The curriculum was designed to develop the trainees' knowledge of: (1) Bookkeeping Theory and Practice, (2) Bookkeeping Machines and Practice, (3) Business Mathematics, English, and Practice, and (4) Office Training and Personal Development. The teacher was a business major with 14 years teaching experience, including 4 years in an administrative capacity. His business experience included work in accounting, payroll, and retail sales. The class was made up of 18 previously unemployed or underemployed trainees ranging in age from 20 to 45, with an average age of 33.5 years and an average education of 11 years. Admission standards were established by the Department of Employment and the College, and bookkeeping aptitude of the trainees was determined through a program of testing, which included the General Aptitude Test Battery, and personal evaluation by a counselor. A followup survey found 10 of the 18 trainees employed. (AW)

VT 008 913 Willis, Josephine C. Coordinator's Handbook, Cooperative Office Education. Bulletin No. 1143.

Louisiana State Dept. of Education, Baton Rouge. Vocational Business and Office Education Section MF AVAILABLE IN VT-ERIC SET.
Louisiana State Department of Education, Post Office Box 44064, Baton Rouge, Louisiana 70804.
Pub Date - 69 120p.

\*PROGRAM GUIDES; \*OFFICE OCCUPATIONS EDUCATION; TEACHING GUIDES; GRADE 12; \*OFFICE OCCUPATIONS; \*COOPERATIVE EDUCATION; COOPERATIVE PROGRAMS; PROGRAM COORDINATION; INSTRUCTOR COORDINATORS; TRANSPARENCIES; RECORDS (FORMS); PROGRAM ADMINISTRATION

This handbook is for teacher use in organizing and promoting a cooperative office education program. The general content objectives are: (1) to provide a realistic method for expanding and improving the instructional program, (2) to provide realistic exploratory occupational opportunities, (3) to develop a practical understanding of our competitive economic system, and (4) to facilitate the students' transition from school to work. The teacher should be a certified teacher coordinator. Students should be high school seniors who are preparing for employment in office occupations. The document is illustrated with charts and drawings suitable for reproduction as transparencies and contains examples of forms pertinent to the operation of a cooperative office education program. (CH)

VT 008 923 Burghardt, Paul G. Cooperative Office Education.

New Jersey State Dept. of Education, Trenton. Div. of Vocational Education MF AVAILABLE IN VT-ERIC SET. Vocational-Technical Curriculum Laboratory, Rutgers University, 10 Seminary Place, New Brunswick, New Jersey 08903 (\$2.00). Pub Date - Sep69 119p.

\*PROGRAM GUIDES; \*BUSINESS EDUCATION; \*PROGRAM PLANNING; \*OFFICE OCCUPATIONS EDUCATION; PROGRAM DESCRIPTIONS; \*COOPERATIVE EDUCATION; OFFICE OCCUPATIONS; SECONDARY GRADES; PROGRAM DEVELOPMENT; TEACHING PROCEDURES

Developed by teachers, supervisors, and teacher administrators, this guide is for use by teacher-coordinators in planning and implementing a cooperative office education program at the high school level. The program has primary objectives of aiding students in making occupational choices by exposing them to a number of employment situations and preparing students educationally for entry and continued employment in the occupational fields of their choice. The contents cover: (1) initial program planning, including assessment of student and community interest, (2) organization and development of the program, which includes teacher-coordinator and advisory committee selection and student recruitment, (3) acquainting parents of participating students with the program, (4) public relations, (5) the guidance department's role in the program, (6) legal aspects of the program, (7) related courses and individual study programs available, (8) responsibilities of teacher-coordinator, student, and employer, and (9) student follow-up. Supplementary materials appended are a selection of sample forms, applications, and records, and a section of photographs dramatizing job opportunities available through the program. (AW)

VT 008 992
Developing Economic Concepts through Introduction to Business. Bulletin No. 163.

New York State Education Dapt., Albany. Bureau of Business and Distributive Education MF AVAILABLE IN VT-ERIC SET. Pub Date - Oct64 30p.

\*CURRICULUM GUIDES; \*CURRICULUM PLANNING; \*BUSINESS EDUCATION; \*QUESTIONING TECHNIQUES; INSTRUCTIONAL AIDS; \*ECONOMICS; SECONDARY GRADES; ACHIEVEMENT TESTS

Developed by the staff of the New York State Bureau of Business and Distributive Education, this bulletin is for use by high school teachers in planning courses intended to aid students in developing broad economic concepts through a basic introduction to business subjects. The booklet is comprised of examples of questioning techniques which are designed to stimulate students' ability to bring together pertinent facts, assess their interrelationships, and arrive at logical generalizations. The four levels of questioning covered are: (1) factual-type, or recall of specific information, (2) knowledge-level, which measures factual relationships, (3) understanding-level, which assesses the student's ability to comprehend, interpret, and analyze factual relationships, and (4) concept-and-attitude-level questioning, designed to measure the student's concept of and attitude toward various areas of business and economic education. Forty-five illustrative questions, with answers, are given, grouped according to business topic and coded as to level. (AW)



VT 009 047

Secretarial Skills and Procedures. Adult Course Outline. Bulletin 134.

New York State Education Dept., Albany. Bureau of Business and Distributive Education MF AVAILABLE IN VT-ERIC SET, Publications Distribution Unit, State Education Department, Room 169, Education Building, Albany, New York 12224 (\$.40). Pub Date -64 43p.

\*CURRICULUM GUIDES; \*BUSINESS EDUCATION; OFFICE OCCUPATIONS EDUCATION; \*SECRETARIES; \*ADULT VOCATIONAL EDUCATION; \*CURRICULUM PLANNING; COURSE OBJECTIVES; COURSE ORGANIZATION; TEACHING PROCEDURES; BIBLIOGRAPHIES

Prepared by a committee of private secretaries under direction of the state supervisor of adult business education, these outlines are for teacher use in course planning. The courses outlined are designed to prepare students both to pass the Certified Professional Secretaries examinations and for employment as top-level private secretaries. The content is divided into two units, each comprised of seven 2-hour sessions, and is intended to assist trained secretaries in reviewing basic but seldom-used skills and procedures. The first unit is concerned with the skills, including typing, office machines operation, and letter writing, and the second with procedures such as receptionist duties, mail routines, and communications. Each unit contains a statement of purpose, teaching suggestions, equipment needed, student activities, and an outline of material to be covered. The instructor should be a qualified secretary or an experienced business teacher. A bibliography and a section of Tips for Instructors, giving suggestions for preparation and presentation of course material, are included. (AW)

Typewriting: A Tentative Program of Instruction. Curriculum Bulletin No. 36.

New Orleans Public Schools, La. Div. of Instruction MF AVAILABLE IN VT-ERIC SET. 63 42p. Pub Date -

\*CURRICULUM GUIDES; TEACHING GUIDES; \*BUSINESS EDUCATION; \*TYPEWRITING; \*COURSE CONTENT; SECONDARY GRADES; \*OFFICE OCCUPATIONS

Developed by a committee of typewriting teachers, this curriculum guide is for teacher use in planning typing courses for the high school or vocational school level. The primary objective of the 36-week course is to prepare high school students who have had no previous typing training to use the typewriter with the speed and accuracy necessary for employment in a business office. The content includes a topical outline of the course, listing the three major units to be covered: skills to be taught, instruction on care of the typewriter, and teaching students to manipulate all parts of the typewriter. Goals and skills to be achieved are then listed specifically for each 6-week period. Teaching aids and a selected bibliography are given. General suggestions for the teacher are headed: (1) Getting Ready, which deals with preparation of the classroom and equipment, (2) First Lesson, suggesting ways for effectively introducing course material, (3) Lesson Two, preparing for the second day's class, and (4) Timed Relay, which deals with practical exercises. The course should be taught by a certified typing teacher. (AW)

VT 009 191

Business and Office Education Handbook, 1966-67. Bulletin No. 1080.

Louisiana State Dept. of Education, Baton Rouge. Business and Office Education Section MF AVAILABLE IN VT-ERIC SET.
Pub Date - 67 155p.

\*TEACHING GUIDES; \*STATE CURRICULUM GUIDES; \*BUSINESS EDUCATION; \*OFFICE OCCUPATIONS; VOCATIONAL HIGH SCHOOLS; SECONDARY GRADES; LESSON PLANS; INSTRUCTIONAL AIDS; CURRICULUM PLANNING LOUISIANA

This teacher handbook was developed by a committee of teachers, supervisors, and teacher-educators to be used in lesson and course planning for vocational high school business education programs. Although prepared for use in Louisiana schools, it is adaptable for any geographical area. The primary purpose of the program is to provide students with the information, opportunities, experiences, and training necessary to prepare them for employment in business occupations. An introductory section on "The Business Education Curriculum" lists, in table form, the state approved business education subjects for secondary schools, including grade level, required hours, and units of credit. The major portion of the handbook presents brief guidelines for teaching specific business education courses. These are arranged alphabetically and include descriptive information, objectives, course content, testing and grading suggestions, supplementary materials, and teaching suggestions. For most subjects, lesson or unit plans are also provided. Subjects covered are: (1) bookkeeping, (2) business arithmetic, law, and English, (3) economics, (4) business machines, (5) office practice, (6) typing, (7) shorthand, (8) cooperative education, and (9) general business. Information on Future Business Leaders of America contests, equipment and supplies needed, and supplementary materials is also given. (AW)

VT 009 363
The Training of Accountants. Recommendation 3.

Electricity Supply Industry Training Board, London (England) MF AVAILABLE IN VT-ERIC SET. Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England. Pub Date - Sep68 7p. Pub Date -

\*BUSINESS EDUCATION; \*ACCOUNTAN'S; ÉLECTRICAL OCCUPATIONS; \*OFFICE OCCUPATIONS; ON THE JOB TRAINING; \*PROGRAM GUIDES; ADULT VOCATIONAL EDUCATION; \*FOREIGN COUNTRIES; EDUCATIONAL PROGRAMS ENGLAND: ELECTRICITY SUPPLY TRAINING BOARD

This program guide was developed to proscribe training for accountants. It is one of 18 recommendations on various training programs. The content includes outlines of: (1) Objectives, (2) Recruitment, (3) Program of Training, (4) Induction, (5) On-Job Training, (6) Background Training, (7) Further Education, (8) Supervision of Training, (9) Duration of Training, (10) Record of Training, and (11) Career Development. A suggested training program is available as VT 009 364 (in this issue). (GR)

Syllabus of Training for Accountants.

Electricity Supply Industry Training Board, London (England) MF AVAILABLE IN VT-ERIC SET. Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England. Pub Date - Sep68 10p.



188

\*CURRICULUM GUIDES; \*ACCOUNTANTS; ON THE JOB TRAINING; EDUCATIONAL PROGRAMS; \*BUSINESS EDUCATION; ELECTRICAL OCCUPATIONS; \*FOREIGN COUNTRIES ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This curriculum guide was designed to replace the appendix of VT 009 363 (in this issue). It may be used in planning programs relevant to the whole range of accounting work and associated subjects. While the syllabus is concerned primarily with the on-job aspects of the program, provision is made for the complementary aspects of induction, background training and further education. The contents are: (1) Subsidiary Accounting Records, (2) Financial Records and Accounting, (3) Costing and Management Accountancy, (4) Electronic Data Processing, (5) Audit and Associated Matters, (6) Services to Management in Matters Affecting Financial Policy, (7) Further Education, and (8) Induction and Background Training, (GR)

VT 009 365 The General Training of Clerical Staff. Recommendation 4.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Dec68 9p.

\*CLERICAL WORKERS; ON THE JOB TRAINING; \*BUSINESS EDUCATION; \*OFFICE OCCUPATIONS; \*PROGRAM GUIDES; ELECTRICAL OCCUPATIONS; \*FOREIGN COUNTRIES; EDUCATIONAL PROGRAMS ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This publication was developed as a program guide for the general training of clerical staff. The content includes: (1) Objectives, (2) Recruitment, (3) Program of Training, (4) Induction, (5) Formal Training, (6) On-Job Training, (7) Supervision, (8) Further Education, (9) Duration of Training, (10) Record of Training, and (11) Career Development. (GR)

VT 009 498 Understanding Financial Statements; 7 Keys to Value.

New York Stock Exchange, N.Y.

MF AVAILABLE IN VT-ERIC SET.

Department of Public Information, New York Stock Exchange, 11 Wall Street, New York, New York 10005.

Pub Date - Sep68 32p.

\*RESOURCE MATERIALS; \*BUSINESS EDUCATION; \*ECONOMICS; \*INVESTMENT; \*FINANCIAL SERVICES; MONEY MANAGEMENT

The purpose of this publication is to provide aid in understanding and interpreting financial statements in order to evaluate and determine investment values. The first portion of the booklet includes brief explanatory information on corporation annual reports, financial statements, and the significance of financial ratios, followed by a sample balance sheet for "Your Company" covering the areas of: (1) Assets, Liabilities, and Stockholders' Equity, (2) Statement of Income, and (3) Statement of Earned Surplus. The second section presents, explains, and applies to "Your Company," the "7 Keys to Value": (1) Pre-Tax Profit Margin, (2) Current Ratio, (3) Liquidity Ratio, (4) Capitalization Ratios, (5) Sales to Fixed Assets, (6) Sales to Inventories, and (7) Net Income to Net Worth. Additional ratios to aid in appraising securities are defined and applied to "Your Company" in the section on investment analysis, and the final portion provides a brief summary of the importance of financial ratios. The booklet is illustrated with several tables and graphs. (AW) summary of the importance of financial ratios. The booklet is illustrated with several tables and graphs. (AW)



DISTRIBUTIVE EDUCATION SECTION



VT 006 011 Distributive Education--Wholesaling. A Pilot Program at Hartford Public High School.

Hartford Board of Education, Conn.
Connecticut State Dept. of Education, Hartford. Div. of Vocational Education
MF AVAILABLE IN VT-ERIC SET.
Pub Date - 12Jul67 80p.

\*DISTRIBUTIVE EDUCATION; \*WHOLESALING; \*MARKETING; \*PILOT PROJECTS; \*COOPERATIVE EDUCATION; PROGRAM EVALUATION; CURRICULUM; GRADE 11; GRADE 12; RECORDS (FORMS); GLOSSARIES; FOLLOWUP STUDIES

A 2-year pilot program in distributive education, with special emphasis on occupational education and training in wholesaling, is reviewed. Along with the program objectives, this report presents a topical outline teaching high school juniors and seniors an instructional program in wholesaling. An analysis of program development and follow-up shows that, in the first and second years of operation, the student enrollment numbered 13 (11 males and two females) and 21 (15 males and six females) respectively. Students enrolled during the first year averaged 15 1/2 hours of job training and earned an average hourly rate of \$1.28. The followup of this group indicates seven out of 13 are employed in the labor force, six in the occupation for which they trained and one in a related occupation. The average hourly rate of this employed group is \$2.24. Recommendations of this study are: (1) that the present wholesaling program to be expanded into a 2-year program with marketing taught in Grade 11 and wholesaling in Grade 12, (2) that job placement with coordination be included for both Junior and senior students, and (3) that students in distributive education be allowed to leave school after lunch. (CH)

VT 008 021 Huckabee, June, Comp. Communication in Distribution. First-Year Basic Instruction.

190

Texas Univ., Austin. Instructional Materials Lab.
DOCUMENT NOT AVAILABLE FROM EDRS.
Instructional Materials Laboratory, Distributive Education Department, Division of Extension, The University of Texas, Austin, Texas 78712 (\$7.00).
Pub Date - 68 185p.

\*TEACHING GUIDES; \*DISTRIBUTIVE EDUCATION; \*MARKETING; \*COMMUNICATION (THOUGHT TRANSFER); \*COMMUNICATION SKILLS; SECONDARY GRADES; LISTENING SKILLS; READING SKILLS; SPEECH SKILLS; WRITING SKILLS; OBSERVATION; TRANSPARENCIES

This teaching guide is for use in teaching communications in distribution to first-year distributive education students in high schools. It is a revision of an earlier manual (VT OCO 170, found in AIM Fall 1969). Teachers throughout Texas reviewed the materials and suggested alterations and deletions. The content ojectives are to define and explain communications, provide application of basic communication skills to the distributive situations, and provide training for students in all phases of communication skills to the distributive reading, and writing. Units are: (1) Communication Defined and Explained, (2) Listening and Observing-Their Place in Communication, (3) Reading, Its Place in Communication, (4) Oral Communication, and (5) Written Communication. Each unit contains aims and objectives, materials needed by the coordinator, suggested films, suggestions to the teacher, and a complete teaching outline. Also included are overhead transparency masters. The materials are adaptable to all geographic regions and is designed to be concluded in 4-6 weeks of classroom activities. Students should have occupational goals in the area of marketing and distribution. The book, "Communications," published by Kaiser Aluminum Corporation is desirable for use with this guide. (MM)

VT 008 094 Discount Retailing. Small Business Bibliography No. 68.

Small Business Administration, Washington, D.C.
MF AVAILABLE IN VT-ERIC SET.
Small Business Administration, 1441 L Street, N.W., Room 100, Washington, D.C. 20416 (single copies without charge).
Pub Date - Apr 68 7p.

\*RETAILING; \*BIBLIOGRAPHIES; \*BOOK LISTS; \*MARKETING; OCCUPATIONAL INFORMATION; PUBLICATIONS; RESOURCE MATERIALS; MANAGERIAL OCCUPATIONS \*DISCOUNT RETAILING

This bibliography lists books and other publications, including periodicals, which should provide information on discount retailing. Also listed are some trade associations that promote the low-margin retailing practices. Briefly discussed in this document are the three types of discount operations: the speciality discount store, the closed-door (membership) discount store, and the full-line, self-service discount department store. Two methods of entering the discount retail field are summarized. (MM)

VT 008 '191'
Hoffman, Kenneth E.
Show Card Lettering and Layout.

Kansas State Board for Vocational Education, Topeka Kansas State Teachers Coll., Emporia MF AVAILABLE IN VT-ERIC SET. Kansas State Teachers College, Emporia, Kansas 66801 (\$2.50). Pub Date - 68 35p.

\*PROGRAMED TEXTS; \*PROGRAMED MATERIALS; \*DISTRIBUTIVE EDUCATION; \*DISPLAY PANELS; \*EXHIBITS; MERCHANDISING; BUSINESS SKILLS; ART EDUCATION; GRAPHIC ARTS

The purpose of this programed text is to aid distributive education teachers in training personnel to make effective advertising show cards for use in retail business establishments. Written by an individual in cooperation with subject matter consultants, the manual contains three sections: (1) Planning, Balance, and Layout of Cards, (2) Basic Lettering Systems, and (3) Lettering and Layout for Cards and Posters, including both general rules and specific hints for cardmaking. The first section presents basic questions and answers in the programed format, while sections two and three provide sample exercises to be performed to develop the skills necessary for show card production. The text is illustrated with numerous line drawings and sample posters and show cards. (AW)



VT 008 245
Luter, Robert R., Comp.
Basic Organization of Distribution. First-Year Basic Instruction.

Texas Univ., Austin. Instructional Materials Lab.
DOCUMENT NOT AVAILABLE FROM EDRS.
Instructional Materials Laboratory, Distributive Education Department, Division of Extension, The University of Texas, Austin, Texas 78712 (\$4.00).
Pub Date - 68 116p.

\*TEACHING GUIDES; \*DISTRIBUTIVE EDUCATION; \*MARKETING; \*HIGH SCHOOLS TEXAS

This guide is for teacher use in presenting the basic organization of distribution to first-year distributive education students at the high school level. A revision of VT 000 156 (AIM Fall 1969), this manual is a result of alterations and deletions suggested by teachers throughout Texas. The content objectives are to develop the understandings required in operating a successful business. Units are: (1) How Our American Business System understandings required in operating a successful business. Units are: (1) How Our American Business System understandings required in operating a successful business. Units are: (1) How Our American Business System understandings required in operating a successful business. Units are: (1) How Our American Business System understandings required in operations of Distributive Operates, (2) Channels of Distribution, (3) Disribution in the Local Community, (4) Fundamentals of Distributive Organization, and (5) How A Distributive Business is Organized for Work. Included in each unit are the aims and Objectives of the unit, suggestions to the teacher, and a complete training outline with summary, vocabulary words, and suggested visual aids. The teacher should have a knowledge of basic marketing and students should be high school age with occupational goals in the field of distribution. (MM)

VT 008 454
Luter, Robert R., Comp.
School and Business Relationships. First-Year Basic Instruction.

Texas Univ., Austin. Instructional Materials Lab.
DOCUMENT NOT AVAILABLE FROM EDRS.
Instructional Materials Laboratory, Distributive Education Department, Division of Extension, The University of Texas, Austin, Texas 78712 (\$5.00).
Pub Date - Jan69 159p.

\*TEACHING GUIDES; \*DISTRIBUTIVE EDUCATION; \*ORIENTATION MATERIALS; SECONDARY GRADES; \*PROGRAM DESCRIPTIONS; OCCUPATIONAL INFORMATION; CAREER CHOICE; PERSONAL GROWTH; WORK ATTITUDES TEXAS

This guide is for use in teaching a unit on school and business relationships to first-year distributive education students at the high school level. The manual is a revision of VT 000 155 (AIM Fall 1969). All materials were reviewed with alterations and deletions suggested by teachers throughout Texas. Units are: An introduction to Distributive Education, Orientation, Personal Development and Preparation for Work, and Your Career in Distribution. Included in each unit are the objectives, materials needed by the teacher-coordinator, suggested films, suggestions to the teacher, a complete teaching outline, vocabulary, and overhead projector transparency masters. The suggested time allotment is for 4 to 6 weeks of classroom activity. The material is geographically adaptable to all regions although there is emphasis on Texas programs. (MM)

VT 008 583 101 Case Problems in Retail Selling.

Indiana State Dept. of Public Instruction, Indianapolis. Distributive Education Service Indiana State Univ., Terre Haute. Distributive Education Service MF AVAILABLE IN VT-ERIC SET. Vocational Instructional Materials Laboratory, School of Technology, Indiana State University, Terre Haute, Indiana 47809 (\$1.00). Pub Date - Nov63 218p.

\*CASE STUDIES; \*DISTRIBUTIVE EDUCATION; \*SALES OCCUPATIONS; \*SALESMANSHIP; SALES WORKERS; \*INSTRUCTIONAL MATERIALS; INSTRUCTIONAL AIDS; SECONDARY GRADES

This manual, for use in teacher-student discussion groups, consists of a number of cases involving actual sales situations in store selling. It was developed and compiled by a subject matter specialist and teacher educators to present to high school distributive education students a representative cross section of the types of problems that may face a salesperson. Suggestions for effective presentation of material, how to involve all members of the group in the discussion, and how to keep the group interested in the material are given. Some of the subjects covered in the manual are: (1) proper approach to the customer, (2) handling price objections, (3) selling to different types of customers, (4) handling exchanges, credit problems, and complaints, (5) spotting and dealing with shoplifters, (6) stock handling, (7) various sales techniques, and (8) personal habits, attitudes, and conduct of the salesperson. Each case presents the situation, the problem, possible solutions, and basic principles involved. Cases should be selected and adapted by the group leader to suit the needs and interests of the group. The discussion groups should be conducted by certified distributive education teachers. (AW)

VT 008 824 Ellis, 0.H. Store Security (Transparency Masters).

Clemson Univ., S.C. Vocational Education Media Center
South Carolina Dept. of Education. Office of Vocational Education
MF AVAILABLE IN VT-ERIC SET.
State Supervisor of Distributive Education, Rutledge Building, Office of Vocational Education, State Department of Education, Columbia, S.C. 29207 (one per state supervisor of distributive education).
Pub Date - nd 22p.

\*TRANSPARENCIES; \*DISTRIBUTIVE EDUCATION; \*SECURITY; \*RETAILING; SECONDARY GRADES; INSTRUCTIONAL AIDS

Distributive education teachers may use instructional aids produced from these transparency masters in teaching store security to high school classes. Slides present illustrations of: (1) professional, amateur and kleptomaniac shoplifters, (2) gimmicks used by shoplifters, (3) prevention of shoplifting, (4) register robbing, and (5) passage of bad checks. A mimeograph script accompanies the 16 transparencies. (DM)

VT 008 885 Bennett, Robert Cooperative-Distributive Education; An Alternate Semester Program.



College of San Mateo, Calif.
California State Dept. of Education, Sacramento. Bureau of Business Education
MF AVAILABLE IN VT-ERIC SET.
Pub Date - 68 13p.

\*PROGRAM DESCRIPTIONS; \*DISTRIBUTIVE EDUCATION; \*COOPERATIVE PROGRAMS; EDUCATIONAL PLANNING; \*CURRICULUM; WORK STUDY PROGRAMS; JUNIOR COLLEGES; \*PROGRAM EVALUATION; DISTRIBUTIVE OCCUPATIONS; EMPLOYER ATTITUDES; STUDENT ATTITUDES; RECRUITING CALIFORNIA; \*SAN MATEO JUNIOR COLLEGE

The purpose of this study was to determine the feasibility of using the cooperative education plan in junior colleges for students seeking distributive careers. The study is limited to students from college of San Mateo during spring semester of 1968 and employers in the San Francisco Bay area. Section I provides a summary of new information gained through the study, summarizes the responses of 50 employers who were interviewed, and provides civilian employment statistics for the San Francisco Bay area. Section II describes the alternative semester cooperative education work-study plan for college students. Included are summaries of previous studies and a brief historical sketch of this movement in education. Section III summarizes reports from participants in the initial pilot program. Direct reports of students and employer statements about the cooperative education-distributive alternating semester plan supplements the presentation of statistical data. (CH)

VT 008 938
Parliamentary Procedures (Transparency Masters).

Clemson Univ., S.C. Vocational Education Media Center
South Carolina State Dept. of Education, Columbia. Office of Vocational Education
MF AVAILABLE IN VT-ERIC SET.
State Supervisor of Distributive Education, Rutledge Building, Office of Vocational Education, State Department of Education, Columbia, S.C. 29201.
Pub Date - 68 12p.

\*TRANSPARENCIES; \*DISTRIBUTIVE EDUCATION; \*LEADERSHIP TRAINING; \*PARLIAMENTARY LAW; STUDENT ORGANIZATIONS; INSTRUCTIONAL AIDS; SECONDARY GRADES

Developed by a committee of teachers for use in high school distributive education classes, instructional aids produced from these 11 transparency masters may assist in illustrating simple parliamentary procedure. Abilities include: (1) introducing business, (2) raising of privilege, (3) motions to adjourn, (4) amendments, (5) referring to a committee, (6) laying on the table, (7) the agenda or order of business, and (8) how a motion should progress. (DM)

VT 008 944
Distributive Education Clubs of America (Transparency Masters).

Clemson Univ., S.C. Vocational Education Media Center
South Carolina State Dept. of Education, Columbia. Office of Vocational Education
MF AVAILABLE IN VT-ERIC SET.
State Supervisor of Distributive Education, Rutledge Building, Office of Vocational Education, State Department of Education, Columbia, S.C. 29201 (one per state supervisor of distributive education).
Pub Date - nd 9p.

\*TRANSPARENCIES; \*DISTRIBUTIVE EDUCATION; \*LEADERSHIP TRAINING; \*STUDENT ORGANIZATIONS; INSTRUCTIONAL AIDS; SECONDARY GRADES \*DISTRIBUTIVE EDUCATION CLUBS OF AMERICA; DECA; SOUTH CAROLINA

Developed by a committee of teacher educators, teachers and supervisors, these transparency masters are for use in classroom presentations by teachers of distributive education in high school vocational programs. Instructional aids developed from these masters may be used in illustrating to students: (1) the purpose of Distributive Education Clubs of America (DECA), (2) the history of DECA, (3) the DECA emblem, (4) DECA activities, (5) essentials for a good DECA chapter, and (6) the DECA state leadership conference. Eight masters are included. (DM)

VT 008 989
Luter, Robert R.
Color Dynamics for Marketing and Distribution.

Texas Univ., Austin. Instructional Materials Lab.
DOCUMENT NOT AVAILABLE FROM EDRS.
Instructional Materials Laboratory, Distributive Education Department, Division of Extension, The University of Texas, Austin, Texas 78712 (\$8.95 per kit).
Pub Date - Sep68 350p.

STUDY GUIDES; \*RESOURCE UNITS; \*DISTRIBUTIVE EDUCATION; \*MERCHANDISING; \*COLOR PLANNING; SECONDARY GRADES; POST SECONDARY GRADES; ANSWER KEYS; \*VISUAL PERCEPTION; SUPPLEMENTARY TEXTBOOKS; SELECTED PROJECTS; MARKETING

This kit for teacher and student use in a distributive education preparatory or cooperative high school or Junior college course was developed by a subject matter specialist. It is intended to assist the student to develop the basic knowledge of color vital to merchandising and distribution. The student study manual and answer book published by the instructional materials laboratory are supplemented by "Come Catch a Rainbow" (Pittsburgh Plate Glass Company, 1963), "Light and Color" (General Electric, 1967), and "The First Book of Color," by Herbert P. Paschel (Chanticleer Press, Incorporated, 1959). Subjects of assignment are: (1) Why Study Color, (2) Color Through the Centuries, (3) The Element of Light in Color, (4) How We See Color, (5) Color Associations, (6) Colorimetry, (7) Color Systems, (8) Color Illusions, (9) The Influences of Colors, (10) The Impact of Color in Selling, (11) The Color in Women's Fashions, (12) Color in Masculine Apparel, (13) Color in Cosmetics, (14) Colors in Product Packaging, (15) Color in Food Merchandising, (16) Color and Light in Store Interiors, (17) Color as Product Appeal, (18) Color in Interior Design and Decoration, (19) Color in Home Furnishings, and (20) Color in Advertising. The kit was designed to serve as a complete resource unit without additional references. (JK)



HEALTH OCCUPATIONS

EDUCATION

SECTION

ERIC A Provided by Effic

193

VT 006 921 Staff Development: Motivation and Stimulation of Employees, Instructional Outline.

Pennsylvania State Univ., University Park. Dept. of Nursing MF AVAILABLE IN VT-ERIC SET.
Pub Date - 68 21p.

\*COURSE DESCRIPTIONS; \*INSERVICE COURSES; \*NURSING; COURSE EVALUATION; \*SUPERVISION; \*SUPERVISORY METHODS; HEALTH PERSONNEL

Designed to assist supervisory nursing personnel to develop skills and understanding in preparing and maintaining a competent staff, the 5-day course has the specific objectives of (î) developing techniques that can motivate and stimulate workers, (2) understanding the process of change and its effect on behavior, (3) understanding the factors that produce and sustain desirable behavior in employees and (4) understanding how supervisory roles can affect the qualitative performance of employees. General topics outlined include "What Motivates Employees?", "Contributing Factors in Work Satisfaction," "The Process of Change," "Learning About Your Employees Through Interview," "The Role of Staff Development in Effecting Better Nursing Care: Promoting Work Satisfaction," "Utilizing the Potential of Your Staff Effectively," "Counselling Employees to Adjust on the Job--a Supervisory Responsibility," "Handling Grievances and Complaints of Nursing Personnel," "The Supervisor in Labor Management Functions," and "The Nursing Supervisor's Role in Maintaining Discipline." Group tasks and other instructional methods are suggested and related films are listed. A detailed course evaluation by the participants is included. (JK)

VT 007 820 ED 029 955
Smith, Elizabeth M.
Practical Nursing Education. A Guide for Teaching Basic Concepts and Skills in the Use of Drugs. Pamphlet Number 4.

National Association for Practical Nurse Education and Service, Inc., New York, N.Y. EDRS PRICE MF \$0.25 HC \$1.45 National Association for Practical Nurse Education and Service, Inc., 535 Fifth Avenue, New York, N.Y. 10017 (\$1.50). Pub Date 67 27p.

\*PRACTICAL NURSING; \*CURRICULUM GUIDES; \*DRUG THERAPY; PRACTICAL NURSES; \*HEALTH OCCUPATIONS EDUCATION; COURSE CONTENT; MEDICAL TREATMENT; COURSE ORGANIZATION

Intended to assist teachers in either basic or continuing education programs to convey knowledge, techniques, and attitudes pertaining to drugs, the pamphlet outlines instruction which is estimated to require 70 to 100 hours of which 50 to 80 should be scheduled for classroom work and 20 hours for clinical work. Three units containing concepts fundamental to the use of drugs should be presented early in the program in association with some supervised clinical experiences. The remaining units concern concepts for the use of specific drugs such as disinfectants, and drugs that affect the skin and mucous membrane and drugs that affect the circulatory system and the blood, the respiratory system, the gastrointestinal system, the urinary system, the nervous system, and the endocrine and reproduction systems, and should be correlated with teaching in the clinical area and supervised experiences with patients. Each unit outline includes time allotment, objectives, subjects for discussion, and suggested teaching methods. Included are a bibliography and a list of pharmaceutical companies from which teaching materials are available. (JK)

VT 007 956 Knoedler, Evelyn L. Manual for the Nurse's Aide.

MF AVAILABLE IN VT-ERIC SET.
Delmar Publishers Inc., Mountainview Avenue, Albany, New York 12205.
Pub Date - 68 109p.

\*TEXTBOOKS; \*HEALTH OCCUPATIONS EDUCATION; \*NURSES AIDES; OCCUPATIONAL INFORMATION; \*JOB SKILLS; INSERVICE EDUCATION; ILLUSTRATIONS

This manual is for use by nurse aide trainees. It was developed by a professional nurse with a background in training auxiliary personnel. The first section deals with attitudes, relationships, and basic skills. Basic procedures include: (1) handwashing, (2) caring for hospital equipment, (3) cleaning a patient unit, (4) bedmaking, (5) admitting a patient, (6) caring for the patient's valuables, (7) dressing and undressing the patient, (8) feeding the helpless patient, (9) giving the bedpan and urinal, (10) collecting urine specimens, (11) moving and turning the patient, (12) preparing the patient for surgery, (13) caring for the mouth and teeth, (14) caring for the hair and scalp, (15) giving a back rub, and (16) caring for the hands and feet. The second section covers advanced procedures including: (1) giving a bed bath, (2) assisting with a shower, (3) giving a sitz bath, (4) inserting a rectal tube, (5) giving a cleansing enema, (6) giving an oil retention enema, (7) applying binders, (8) restraining a patient, (9) taking temperature, pulse, and respiration, (10) preventing and treating decubitus, (11) applying a bed cradle, and (12) caring for the body after death. (JK)

VT 008 375
Ames, Kathryn G.
A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse.

Public Health Service (DHEW), Washington, D.C. Div. of Indian Health MF AVAILABLE IN VT-ERIC SET.
Pub Date - Jan68 64p.

\*CURRICULUM GUIDES; \*HEALTH OCCUPATIONS EDUCATION; \*NURSING; \*PUBLIC HEALTH; \*PRACTICAL NURSES; AMERICAN INDIANS

This syllabus is designed to serve as a guide for the training of ancillary personnel, primarily Indian Licensed Practical Nurses, to assist in public health nursing programs. Areas of training are: (1) field clinic activities, (2) school health services, (3) home visiting activities, (4) administrative duties, and (5) community activities. The phases of the three-month program are: (1) orientation, 8 hours, (2) classwork, 116 hours, (3) field observation, 85 hours, (4) field practice, 152 hours, and (5) other activities (case conferences, teaching project, case study, etc.), 120 hours. The program director and field supervisor should be professional public health nurses. Four students, already licensed as practical nurses are admitted for training three times each year. In addition to a curriculum guide, the manual includes sections on student selection, field practice facilities, student evaluation, and program evaluation. Appendixes include; (1) a family care planning sheet, (2) a field training experience record, (3) a case study culture, (4) a student evaluation form, (5) program evaluation forms, (6) a sample schedule of public health nursing activities, and (7) a sample schedule of student activities. (JK)



VT 008 486 ED 031 565 Water and Wastewater Technology; A Suggested 2-Year Post High School Curriculum.

Department of the Interior, Washington, D.C.
Office of Education (DHEW), Washington, D.C. Div. of Vocational and Technical Education
EDRS PRICE MF-\$0.75 HC NOT AVAILABLE FROM EDRS.
OE-80057
Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (FS5.280:800)

Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (FS5.280:80057, \$1.50). Pub Date - Dec68 141p.

\*ENVIRONMETAL TECHNICIANS; \*WATER RESOURCES; \*TECHNICAL EDUCATION; \*PROGRAM GUIDES; \*POST SECONDARY EDUCATION; HEALTH PERSONNEL; COURSE DESCRIPTIONS; EDUCATIONAL FACILITIES; EDUCATIONAL EQUIPMENT; PROGRAM COSTS; BIBLIOGRAPHIES; PROGRAM ADMINISTRATION; CURRICULUM; PROGRAM DEVELOPMENT; CURRICULUM GUIDES \*WATER AND WASTE WATER TECHNOLOGY

This curriculum guide with accompanying course outlines was developed by technical education specialists for teacher use in conducting courses of instruction for the preparation of water and wastewater technicians. The content objectives are to provide students with a background of knowledge in the diverse areas of applied sanitation which relate to water and wastewater; a foundation in microbiology and basic hydraulics, sanitary chemistry and biology, water supply and wastewater collection, water purification, wastewater treatment, and water pollution control. The material is to be used over a 2-year period of systematic instruction at the post secondary level of education. Teachers of sanitation subjects must have special competencies derived from training in technical subject matter, practice, and instructional experience. Students should be high school graduates with reasonable maturity and seriousness of purpose and whose educational backgrounds include chemistry, physics, and mathematics, including algebra and geometry. In addition to a 265-entry bibliography of texts and references, information on technical education procedure, facilities, equipment and cost, and scientific and technical societies is included. (CH)

VT 008 791 ED 030 744 Dental Assistant Training; Standard Course Outline.

Public Health Service (DHEW), Washington, D.C. Div. of Indian Health EDRS PRICE MF -\$0.25 HC-\$2.65 Pub Date - May68 51p.

\*HEALTH OCCUPATIONS EDUCATION; \*DENTAL ASSISTANTS; \*CURRICULUM GUIDES; \*AMERICAN INDIANS

Dental assistant programs at Intermountain School-Public Health Service (PHS) Indian Health Center, Brigham City, Utah; PHS Health Center-Haskell Institute, Lawrence, Kansas; and PHS Alaska Native Hospital, Mt. Edgecumbe, Alaska accept a total of 34 trainees from all areas of the Division of Indian Health annually. The 10-month curriculum operates on a daily schedule of 2 hours of didactic study and 5 hours of practical application. The curriculum outline presented represents the base-line of training conducted at the three centers. Major subject areas are: (1) orientation, (2) office procedures, (3) pre-clinical sciences, (4) dental materials, (5) clinical sciences, (6) clinical application, (7) laboratory and technical application, (8) on-the-job training in the private office, (9) dental health education, and (10) the Division of Indian Health dental program, Demonstrations, applications, readings, and visual aids are suggested for each area. (JK)

VT 008 931 ED 031 581
Itoh, Masayoshi; Eason, Alice L.
Manual for Training Leprosy Rehabilitation Workers.

International Society for Rehabilitation of the Disabled, New York, N.Y. Committee on Leprosy Rehabilitation EDRS PRICE MF -\$0.50 HC-\$3.75 International Society for Rehabilitation of the Disabled, 701 First Avenue, New York, New York 10017 (\$1.00). Pub Date - nd 73p.

\*TEACHING GUIDES; REHABILITATION; SPECIAL HEALTH PROBLEMS; \*PHYSICAL THERAPY; TECHNIQUES; PHYSICAL THERAPISTS; \*PHYSICAL THERAPY AIDES; \*HEALTH OCCUPATIONS EDUCATION; FUNDAMENTAL CONCEPTS; MEDICAL SERVICES \*LEPROSY REHABILITATION

The purpose of this manual is to introduce the general concepts and techniques in leprosy rehabilitation to physical therapy aides. Because of the lack of well-trained, qualified, physical therapists, the committee on leprosy rehabilitation considers it necessary to publish a teaching manual outlining leprosy rehabilitation. for those who work with leprosy patients in the field of physical therapy. This manual is to be used in conjunction with a training course for physical therapy aides under the direction of a qualified physical therapist or physician, and is not to be distributed as self-teaching material. Part I, "General Concepts," contains an outline of leprosy in general, common disabilities, deformities, and general orientation in rehabilitation. Part II, "Techniques," is devoted to a discussion of fundamental techniques which are commonly used in leprosy rehabilitation. Although the educational backgrounds for physical therapy aides may vary among nations, it is suggested that they should have completed at least grade 9 and preferably high school. Leprosy patients who are without serious disabilities and who meet the educational qualifications, may be trained as physical therapy aides. (CH)

VT 008 948 Purser Pharmacist Mate Curriculum. A Training Curriculum.

Public Health Service Hospital, Staten Island, N.Y. MF AVAILABLE IN VT-ERIC SET. Pub Date - nd &2p.

\*CURRICULUM GUIDES; \*HEALTH OCCUPATIONS EDUCATION; \*NURSING; \*MEDICAL TREATMENT; \*PARAMEDICAL OCCUPATIONS UNITED STATES PUBLIC HEALTH SERVICE; \*PHARMACIST MATE

Developed by members of hospital services and the teaching staff of the United State Public Health Service Hospital, Staten Island, New York, this program outline is intended to identify each hour of instruction for those involved in the 9-month Public Health Service course and to provide a guide for others who wish to develop similar paramedical training programs. Units include: (1) Anatomy and Physiology, (2) Environmental Health and Preventive Medicine, (3) Medical and Surgical Conditions, (4) Patient Care, (5) Pharmacology, (6) Health and Preventive Medicine, (3) Medical and Surgical Conditions, (4) Patient Care, (5) Pharmacology, (6) Inical Laboratory, (7) Disaster Control, (8) Pharmacist Mate Responsibilities, and (9) Practical Experience in Surgical Techniques. Each unit outline indicates the agency responsible for teaching the unit, the unit objectives, time allotment for lectures and practical experience, and subject matter content. Appendixes include a list of required procedures and a first aid course outline. (JK)



VT 009 160 Home Health Aide Training Manual.

San Francisco Homemaker Service, Calif.
MF AVAILABLE IN VT-ERIC SET.
San Francisco Home Health Service, 410 Arquello Blvd., San Francisco, California 94118 (single copies without charge).
Pub Date - 67 122p.

\*TEACHING GUIDES; \*CURRICULUM GUIDES; \*HEALTH OCCUPATIONS EDUCATION; \*COMPANIONS (OCCUPATION); ADULT VOCATIONAL EDUCATION; LESSON PLANS

The purpose of this manual is to aid registered nurses in planning courses and lessons designed to train adults seeking positions as home health aides. The suggested 120-hour program was prepared by an individual and group-tested; the primary objective is to develop in the student the knowledge and skills necessary to care for the aged or chronically ill. The content is divided into five major sections, each presenting, in outline form, the subject matter to be covered and procedures and equipment needed. The introductory unit presents general information, statement of purpose, and the duties and ethics of the home health aide. Section II, on interpreting the social and medical needs of the patient, deals with types of diseases, rehabilitation, and basic physiology. The third section is concerned with personal services performed by the aide, such as bedmaking, moving the patient, and personal hygiene of the patient. Section IV relates to nutrition of the patient, and section V, to cleanliness and care tasks in the home. Suggested day-by-day lesson plans, selected references, practical suggestions on food storage, a listing of low-cost nutritious foods, sample examination questions and answers, and physiological diagrams are appended. (AW)

VT 009 175
Hummel, Dorothy K.
A Study in Recruiting and Training Home and Institutional Health Aides.

Lewisburg Area School District, Pa.
Pennsylvania State Dapt. of Public Instruction, Harrisburg, Bureau of Vocational, Technical, and Cont. Educ.
MF AVAILABLE IN VT-ERIC SET.
Mrs. Dorothy K. Hummel, 320 Market Street, Mifflinburg, Pennsylvania 17844 (\$2.00).
Pub Date - May69 80p.

\*CURRICULUM GUIDES; \*PROGRAM PLANNING; \*HEALTH OCCUPATIONS EDUCATION; \*COMPANIONS (OCCUPATION); ADULT VOCATIONAL EDUCATION; PILOT PROJECTS; NURSES AIDES; \*OCCUPATIONAL HOME ECONOMICS LEWISBURG; PENNSYLVANIA

Developed by an area home economics supervisor in cooperation with home economics and nursing education teachers and tested in a 3-year pilot project, this bulletin is for use by teachers, advisory staffs, and administrators in planning programs and courses to recruit and train institutional and home health aides. The major portion of the content is made up of outlines of courses included in the 1966 to 1968 project, which was initiated to alleviate the shortage of qualified health personnel in the Lewisburg, Pennsylvania school district. Some of the 34 subjects outlined are; bedmaking, bathing patients, recognition of symptoms, use of equipment, chronic diseases, pre- and post-operative care, diet and food preparation, and emergency treatments. Each outline presents objectives, generalizations, and suggested learning experiences and activities. General information on the project includes the proposal, recruiting methods, findings, recommendations, and trainee followup. Supplementary materials provided are a bibliography and various sample forms, schedules, and records. Instructors should have home economics or nursing degrees and trainees should be 35 to 40 years old with a minimum of an eighth grade education. Recommended course length is 40 class and laboratory hours plus 6 hours practical training in an institution. (AW)



HOME ECONOMICS EDUCATION SECTION

VT 002 481 Quality Through Growth, A Suggested Guide in Teacher Education for Home Economics Coordinators and Teachers. Circular No. 30.

Wisconsin State Board of Vocational, Technical and Adult Education, Madison MF AVAILABLE IN VT-ERIC SET.
Pub Date - Aug67 27p.

\*INSERVICE TEACHER EDUCATION; \*HOME ECONOMICS TEACHERS; HOME ECONOMICS EDUCATION; TEACHER EVALUATION; SELF EVALUATION; \*TEACHER IMPROVEMENT; \*INSTRUCTIONAL MATERIALS

For those who teach and work with adults this study aims to stimulate personal, professional or instructional improvement methods of instruction. Each teacher or coordinator made a self evaluation and selected one area of concern for further work. They were expected to return reports of their personal project at the end of a year. The document contains suggested guidelines for a personal development plan, listing criteria for self analysis of social and intellectual development, emotional behavior, and physical characteristics. The section on professional improvement questions professional responsibilities, contributions, support of philosophies, participation in professional organizations, and use of literature, meetings, workshops and courses and suggests competencies for various positions. Suggested guides for improvement of instruction list ways to use new methods, visual aids, school and community resources, and public relations, and to evaluate instruction and revise curriculum. Some suggested teaching tools are given. A supplementary section describes placement and followup of students trained for gainful employment, and suggests methods of reporting, evaluating, and securing information, and of recording placement and followup of graduates in home economics occupations. Some resource materials are listed. (FP)

VT 002 813
Out on Your Own.
Denver Public Schools, Colo.
National Committee for Education in Family Finance, New York, N.Y.
MF AVAILABLE IN VT-ERIC SET.
Pub Date - 65 152p.

\*RESOURCE UNITS; \*HOME ECONOMICS EDUCATION; BUSINESS EDUCATION; \*MONEY MANAGEMENT; \*CONSUMER EDUCATION; SECONDARY GRADES; BIBLIOGRAPHIES; \*CURRICULUM GUIDES; FAMILY (SOCIOLOGICAL UNIT)

Resource materials for home economics and business education teacher use in planning money management units for boys and girls, grades 8-12, were developed by local business and home economics teachers at a University of Denver workshop. The importance of the teenage consumer population is acknowledged by the reported expenditure of eleven billion dollars a year on products and services. By 1970, this figure will be an estimated twenty-one billion dollars. It is further projected that by 1970, more than half of the American population will be twenty-five years or younger. The unit in Family Finance was developed to help the teenager handle his income during the teen years, and to assure future adult security. Sources of income, budgeting, buying, savings, housing, insurance, and investments are presented for each of three income levels. A supplementary unit, "Your Teenmobile" which capitalizes on the teenagers great interest in owning and operating a car, contains information on buying, credit, budgeting, insurance, laws and accidents. The materials may be used in part or as a whole for approximately thirty hours of instructional time. A bibliography lists recommended books, pamphlets, periodicals and films. (FP)

Home Economics Evaluation Devices in the Junior High School.

Denver Public Schools, Colo. Div. of Instructional Services MF AVAILABLE IN VT-ERIC SET. Pub Date - 63 239p.

\*STUDENT EVALUATION; \*HOME ECONOMICS EDUCATION; \*ACHIEVEMENT TESTS; INSTRUCTIONAL AIDS; COURSE CONTENT; FOODS INSTRUCTION; FAMILY LIFE EDUCATION; HOMEMAKING EDUCATION; CLOTHING INSTRUCTION; JUNIOR HIGH SCHOOL STUDENTS; SECONDARY GRADES

Prepared by a teacher committee and classroom tested for 2 years prior to publication, this manual is for use by Junior high school home economics teachers in planning, organizing, and evaluating student accomplishments. The content is divided into three major units: (1) Foods, (2) Home and Family Living, and (3) Clothing, each of which is broken down into specific sub-units for which sample tests with answers are given. Unit I, "Foods," covers: (1) Learning to Cook, (2) Preparing Food, (3) Planning and Serving Meals, and (4) Reviewing and Evaluating, which includes Comprehensive Foods Tests I and II. The unit on "Home and Family Living" deals with: (1) Personal Appearance, (2) Enjoying and Caring for Children, (3) Teen-Age Living, and (4) Money Management. The third unit, "Clothing," covers: (1) Selection of Equipment and Sewing Machine Study, (2) Selection and Use of a Commercial Pattern, (3) Selection of Fabrics--Textile Science, (4) Construction Processes, (5) Art Principles in Clothing, and (6) Consumer Buying. Units II and III include vocabulary lists and all three units contain bibliographies. The document is illustrated with line drawings. A certified home economics teacher should present the material and should adapt it to meet local needs and abilities. (AW)

VT 005 916 Courtney, Kathleen, And Others Resource Materials for Family Clothing.

Tulsa Public Schools, Okla.
MF AVAILABLE IN VT-ERIC SET.
Tulsa Public Schools, Home and Family Life Department, P.O. Box 45208, Tulsa, Oklahoma 74145 (\$3.00).
Pub Date - 63 102p.

\*TEACHING GUIDES; \*RESOURCE MATERIALS; \*HOME ECONOMICS EDUCATION; \*CLOTHING; \*CLOTHING INSTRUCTION; LESSON PLANS; SECONDARY GRADES

This manual is for teacher use in planning for high school home economics classes studying units in family clothing. Although originally prepared by a teacher committee specifically for use in the Tulsa, Oklahoma, public schools, the material contained is adaptable to all geographic locations. It is currently in use in more than 40 school systems, including Hawaii and some European countries. Contents cover the origin and purpose of the guide, goals of the program, how to use the guide, and suggested projects, as well as detailed resource units for Family Clothing I, II, and III, and General Homemaking. These units contain objectives, content, suggested activities, suggested references, and teaching suggestions. A section on teaching aids includes: (i) information on staging a fashion show, (2) various sample forms for scoring or evaluating progress, projects, and garments produced, and (3) recommended reference books, bulletins, films, and filmstrips, including sources of availability. A qualified homemaking teacher should conduct the course. (AW)

VT 008 226 ED 030 714
An Outline for Basic Family Life Education, Grades 1 Through 12.



199

AIM/WINTER 69

Salem Public Schools, Ore.
EDRS PRICE MF-\$0.75 HC-\$7.40
Curriculum Department, Salem Public Schools, 1309 Ferry Street, S.E., P.O. Box 87, Salem, Oregon 97308 (\$2.00).
Pub Date - 68 146p.

\*CURRICULUM GUIDES; \*FAMILY LIFE EDUCATION; \*HOME ECONOMICS EDUCATION; SEX EDUCATION; FAMILY RELATIONSHIP; \*HEALTH EDUCATION; FAMILY MANAGEMENT; ELEMENTARY GRADES; JECONDARY GRADES; CONCEPT TEACHING SALEM PUBLIC SCHOOLS; OREGON

The document represents the efforts of a 15-member family life education workshop attended by teachers of grades K-12 with representatives from the fields of home economics, health education, social studies, biology, and counseling services. The curriculums are appropriate for teacher use in grades K through 12 or in teacher training. They were developed, tested, and revised, and are currently on trial in all Oregon schools. Units are classified according to (1) grades 1-6, (2) health grades 7-12, (3) social studies grades 7-8, (4) U.S. history, (5) biology, (6) modern problems, and (7) family living for grades 7-12. Each unit contains sections with introductory material, typical student questions, teachable materials, profitable activities, concepts and attitudes, and lists of films, filmstrips, books and pamphlets. (FP)

VT 008 254
Home Economics Education Guide for Instruction Preparatory to Entering Clothing Service Occupations.

Virginia State Dept. of Education, Richmond. Home Economics Education Service MF AVAILABLE IN VT-ERIC SET. Pub Date - May66 30p.

\*OCCUPATIONAL HOME ECONOMICS; TEACHING GUIDES; \*SERVICE OCCUPATIONS; \*CLOTHING INSTRUCTION; \*CLOTHING MAINTENANCE SPECIALISTS; NEEDLE TRADES; \*COURSE CONTENT; SECONDARY GRADES

Guidelines to aid teachers who are planning courses to prepare grade 11 or 12 boys and girls for clothing service occupations are presented. Selection criteria are included; students should be eligible for employment upon completion of the course. It was recommended that (1) class size be limited to 12 to 15 persons, (2) training be one or two periods for 1, 2, or 3 years, and (3) on the job observation and/or work experience be included. Objectives, content, suggested experiences, and bible ography are listed for units covering: (1) Opportunities for Employment in Clothing Occupations, (2) Personal Qualities Necessary for Entering Employment in Clothing Service Occupations, (3) Development of Basic Skills in Sewing, (4) Selection, Use, and Repair of Sewing Equipment, (5) Alteration and Repair of Garments, (6) Custom Made Home Furnishings, and (7) The Employment Picture-Essential Elements. The document also contains an outline for analyzing a job, information about the mechanics of teaching the course, placement and followup and a bibliography. (FP)

VT 008 276 Cross, Aleene, And Others Evaluation Guide for Homemaking Education.

Gerogia State Dept. of Education, Atlanta. Div. of Vocational Education Georgia Univ., Athens. Dept. of Home Economics Education MF AVAILABLE IN VT-ERIC SET. Department of Home Economics Education, College of Education, University of Georgia, Athens, Georgia (\$1.50). Pub Date - Aug63 206p.

\*HOME ECONOMICS EDUCATION; \*STUDENT EVALUATION; \*ACHIEVEMENT TESTS; SECONDARY GRADES; TESTING; ANSWER KEYS; CHECK LISTS; OBJECTIVE TESTS

Resource materials for classroom teacher use in student evaluation were compiled by graduate students enrolled in the course, "Evaluation in Home Economics" at the University of Georgia. Materials include checklists, score cards, rating skills, pretest, opinionnaires, quizzes, and tests in multiple choice, true-false, yes-no, fill-in, matching, and ranking forms. Devices are organized according to the program areas: (1) Child Care and Development, (2) Cicthing and Textiles, (3) Foods and Nutrition, (4) Home Improvement, Housing and Home Management, (5) Home Nursing, (6) Reationships--Personal, Social and Family, and (7) Home Projects. They are correlated with the curriculum guide "Homemaking Educaton in Georgia, 1962." Listed objectives preface units within each program area. Answer keys are included. (FP)

VT\_008 372
Hawver, Carl F.
A One Week Teaching Unit on Consumer Finance. Teacher's Kit.

N. tional Consumer Finance Association, Washington, D.C. Educational Services Div.
DUCUMENT NOT AVAILABLE FROM EDRS.
Educational Services Division, National Consumer Finance Association, 1000 16th Street, N.W., Washington, D.C.
20036 (\$1.00).
Pub Date - 69 175p.

\*CONSUMER ECONOMICS; \*CONSUMER EDUCATION; \*HOME ECONOMICS EDUCATION; \*MONEY MANAGEMENT; \*CREDIT (FINANCE); TEACHING GUIDES; INSTRUCTIONAL MATERIALS; RESOURCE MATERIALS; RESOURCE UNITS NATIONAL CONSUMER FINANCE ASSOCIATION

Prepared by the Educational Services Division of the National Consumer Finance Association, this teaching unit is for use in high school classes studying money and credit management. The kit consists of two parts, one of teacher materials and the other of materials for the classroom. The teacher materials are comprised of: (1) a teacher's manual, including an introduction to the unit, time schedule, planning sheet, and daily lesson plans, (2) a pamphlet, "Finance Facts," with order card, (3) film study guide and source of availability, (4) order forms for unit materials, (5) a catalog of additional materials, (6) a wall chart flyer, and (7) a chart, "Consumer Credit Outstanding." Classroom materials include: (1) a pre-test and consumer credit quiz, (2) a radio script, "Who Gets the Credit," (3) a family budget guide with worksheet and instructions, (4) two pamphlets, "Basic Principles in Family Money and Credit Management" and "It's Your Money," and a reference book, "Finance Facts Yearbook," and (5) eight 4-minute panel speeches, "Yesterdays, Todays, and Tomorrows." The recommended time allotment for covering the material is 1 week, one period per day, but it may be expanded to cover 2 weeks. (AW)

VT 008 467
Short-Term Course for Cooks in Long-Term Care Facilities. Curriculum Guide for Health Occupations.

Chicago Board of Education, Ill.
MF AVAILABLE IN VT-ERIC SET.
Chicago Board of Education, 228 North La Salle Street, Chicago, Illinois 60601 (\$.75).
Pub Date - 69 60p.



\*CURRICULUM GUIDES; \*HEALTH OCCUPATIONS EDUCATION; \*HOME ECONOMICS EDUCATION; FOOD SERVICE OCCUPATIONS; \*FOOD SERVICE WORKERS; \*COOKS; NURSING HOMES; INSERVICE EDUCATION; HEALTH FACILITIES; ADULT VOCATIONAL EDUCATION

This curriculum guide is for use by teachers of area vocational centers of vocational high schools in planning courses and lessons designed to upgrade employed food service personnel in long-term care facilities such as nursing homes. The guide was prepared by teachers and subject matter specialists and tested on approximately 50 students from 35 different long-term care facilities prior to publication. Six major units cover; (1) Introduction, (2) Fundamentals of Nutrition, (3) Principles of Food Preparation and Service, (4) Therapeutic Diets, (5) Environmental Control, and (6) Techniques of Ordering and Inventory Control. Each unit contains concepts to be developed, content, and suggested learning activities. Instructional materials provided in the appendix include sample trainee evaluation forms, certification qualifications, a measurement table, and food exchange lists for a diabetic diet. Additional resource materials considered necessary for teaching the course are listed, including reference books for the teacher, films, and filmstrips. Availability sources for free or inexpensive instructional materials also are given. The 16-week course consists of 3 hours per week in a formal class setting, with the rest made up of supervised practice. The course instructor should have a background in food service work or home economics education. (AW)

VT 008 473 ED 029 974 Instructional Materials for Occupational Home Economics Food Service Area.

Indiana State Dept. of Public Instruction, Indianapolis. Vocational Home Economics Education EDRS PRICE MF-\$1.50 HC NOT AVAILABLE FROM EDRS. Vocational Instructional Materials Laboratory School of Technology, Indiana State University, Terre Haute, Indiana 47809 (\$2.25). Pub Date - 67 356p.

\*OCCUPATIONAL HOME ECONOMICS; FOODS INSTRUCTION; \*FOOD SERVICE; \*FOOD SERVICE WORKERS; \*STUDY GUIDES; HIGH SCHOOLS; ACHIEVEMENT TESTS; SUPPLEMENTARY TEXTBOOKS; \*COOPERATIVE EDUCATION; ASSIGNMENTS

Materials were developed by subject matter specialists at an Indiana State University workshop for teacher use when planning a cooperative occupational training program for supervised food service workers. Content areas, each printed on a different color paper, include: (1) Grooming and Public Relations, (2) Counter and Cafeteria Service, (3) Dining Room Service, (4) Food Preparation, (5) Cleaning and Equipment, and (6) Sanitation and Safety. Sections contain: (1) information sheets subdivided into objectives, introduction, information and references, (2) instruction units containing prefaces, references, and procedures, (3) task sheets listing equipment, materials, references and procedures, and (4) assignment and operation sheets containing objectives, information, and procedures. Detailed information and procedures are illustrated with line drawings. The appendix contains an organization chart model, a job analysis model, job specification model, job description model, and selected references. (FP)

VT 008 492 ED 029 975 Kupsinel, P., Ed. Home Economics Related Occupations Training Plans.

Indiana Research and Development Coordinating Unit for Vocational and Technical Education, Terre Haute EDRS PRICE MF-\$0.50 HC NOT AVAILABLE FROM EDRS. Vocational Instructional Materials Laboratory, School of Technology, Indiana State University, Terre Haute, Indiana 47809 (\$.75). Pub Date - Jan69 70p.

\*OCCUPATIONAL HOME ECONOMICS; \*LEARNING ACTIVITIES; ON THE JOB TRAINING; \*COOPERATIVE EDUCATION; \*PROGRAM GUIDES; \*SERVICE OCCUPATIONS; CHILD CARE OCCUPATIONS; FOOD SERVICE OCCUPATIONS; CLOTHING MAINTENANCE SPECIALISTS; COMPANIONS (OCCUPATION); MAIDS; SALES OCCUPATIONS; RECORDS (FORMS)

A framework is provided for teacher use in coordinating related classroom instruction, vocational homemaking student career objectives, and planned training station learning experiences. The details were prepared and revised by students of Home Economics Related Occupations 585 at Indiana State University. Child care occupation plans include those for aides in the home, kindergarten, nursery school, and the playground. Clothing related jobs for alterations personnel, maintenance and repair workers, and receivers and spotters at the dry cleaners are outlined. Food service occupation experiences are outlined for: (1) assistant baker, (2) caterer assistant, (3) counterman in a lunch room or coffee shop, (4) dishwasher, (5) grocery checker, (6) hospital diet order clerk, (7) hospital tray girl, (8) salad girl, and (9) short order cook. Suggested areas of training and experiences for household management jobs are included for a home maintenance aide, homemaker's assistant, hotel housekeeper, and school janitoress. Experiences for jobs in sales and care of the elderly are also planned. (FP)

VT 008 694 Consumer Education Bulletin Board Ideas.

Southern Illinois Univ., Edwardsville MF AVAILABLE IN VT-ERIC SET.

Chapter Sponsor, Pi Omega Pi, Southern Illinois University, Edwardsville, Illinois 62025.
Pub Date - 68 26p.; Materials prepared at Workshop in Economic Education, Edwardsville, Ill., Summer 1968.

\*CONSUMER EDUCATION; \*HOME ECONOMICS EDUCATION; EDUCATIONAL RESOURCES; \*BULLETIN BOARDS; CONCEPT TEACHING; \*AUDIOVISUAL AIDS

These ideas were developed by participants in a workshop held at the Southern Illinois University in Summer 1968. Materials are designed to develop concepts of (1) the advantages, characteristics and types of insurance, (2) developing salable skills, (3) reading contracts before signing, (4) banking, (5) investments, (6) savings programs, (7) home ownership, (8) business, (9) partnership, (10) marketing and distribution, (11) credit, and (12) consumer aids. Each page states and illustrates a separate concept, and provides factual information as well as a materials list. (FP)

VT 008 778
Teaching Aids for Home Economics; A Source List.

Florida State Dept. of Education, Tallahassee MF AVAILABLE IN VT-ERIC SET.
Bulletin 75F-6
Pub Date - Aug66 44p.

\*BIBLIOGRAPHIES; \*RESOURCE MATERIALS; \*HOME ECONOMICS EDUCATION; BOOKLISTS; AUDIOVISUAL AIDS; SKITS; ANNOTATED BIBLIOGRAPHIES; INSTRUCTIONAL MATERIALS; TRANSPARENCIES



201

This document is a compilation of resource materials for teacher use at the secondary level. Major categories are books, booklets, bulletins, pamphlets, films, filmstrips and alides, phototapes, socio-guidramas, transparencies, miscellaneous teaching aids, addresses, firms producing films and filmstrips and state adopted textbooks. The first five have the sub-categories of career, child development, clothing and textiles, food and nutrition, housing and home furnishings, management and finance, professional, and relationships. Annotations are included for the films, filmstrips, and slides citations. Related data are included as appropriate, e.g. prices, Cost of film, projection time, grade level, production or publication date. (FP)

VT 008 794 ED 030 745
Carn, Luella L.; Morrow, Mary Elizabeth
Development and Evaluation of a Curriculum of Wage Earning Occupation. Final Report.

Altoona Area High School, Pa.
Pennsylvania State Dept. of Public Instruction, Harrisburg. Bureau of Vocational Technical and Cont. Educ.
EDRS PRICE MF-\$0.50 HC-\$4.30
Altoona Area School District, 1415 Seventh Avenue, Altoona, Pennsylvania 16603.
Pub Date - Jun69 84p.

\*OCCUPATIONAL HOME ECONOMICS; \*COMPREHENSIVE HIGH SCHOOLS; FOODS INSTRUCTION; CURRICULUM GUIDES; SECONDARY GRADES; QUESTIONNAIRES; RECORDS (FORMS); \*CURRICULUM DEVELOPMENT; \*CURRICULUM EVALUATION; CLOTHING INSTRUCTION; MAIDS; \*SERVICE OCCUPATIONS ALTOONA AREA HIGH SCHOOL; PENNSYLVANIA

A 3-year curriculum to be offered by a comprehensive high school to prepare graduates for a wide range of occupations growing out of the knowledge and skills of home economics was designed and implemented. The following curriculum was developed: (1) sophomore year--English, American history, biology, mathematics, orientation to the working world and introduction to clothing construction, typing, and physical education, (2) junior year--English, problems of democracy, recordkeeping and institutional housekeeping, food preparation and quantity foods, clothing workshops, and physical education, and (3) senior year--English, world cultures, health (elective), work experience in two areas, and physical education. Thirty-seven students participated in the program the first year, 81 the second year, and 81 the third year, and changes resulting from evaluation were incorporated each year. It was concluded that boys and girls with varying levels of ability can be trained in occupations growing out of home economics knowledges and skills and that a 2- or 3-year curriculum can be implemented in the comprehensive high school. (JK)

VT 008 904 Future Homemakers of America (Transparency Masters).

Clemson Univ., S.C. Vocational Education Media Center
South Carolina State Dept. of Education, Columbia. Home Economics Education Section
MF AVAILABLE IN VT-ERIC SET.
State Supervisor of Home Economics, Rutledge Building, Office of Vocational Education, State Department of Education, Columbia, South Carolina 29201 (one per state supervisor of home economics).
Pub Date - May68 22p.

\*TRANSPARENCIES; \*HOME ECONOMICS EDUCATION; \*STUDENT ORGANIZATIONS; \*LEADERSHIP TRAINING; SECONDARY GRADES; INSTRUCTIONAL AIDS; ORIENTATION MATERIALS \*FUTURE HOMEMAKERS OF AMERICA; FHA

Developed by a state officer of the Future Homemakers of America (FHA), these transparency masters are for use in developing instructional aids for FHA orientation in junior and senior high schools. Students should be interested in and eligible for FHA membership. The transparencies illustrate: (1) what FHA is, (2) the overall goal of FHA, (3) the eight purposes of FHA, (4) the FHA motto, (5) the FHA creed, (6) the FHA colors, (7) the FHA prayer song, (8) the FHA flower, and (9) the FHA emblem. (DM)

VT 008 905 Consumer Education (Transparency Masters).

Clemson Univ., S.C. Vocational Education Media Center
South Carolina State Dept. of Education, Columbia. Homemaking Education
MF AVAILABLE IN VT-ERIC SET.
State Supervisor of Home Economics, Rutledge Building, Office of Vocational Education, State Department of Education, Columbia, South Carolina 29201 (one per state supervisor of home economics).
Pub Date - Sep68 27p.

\*TRANSPARENCIES; \*CONSUMER EDUCATION; \*HOME ECONOMICS EDUCATION; \*HEALTH EDUCATION; \*FAMILY LIFE EDUCATION; \*CONSUMER ECONOMICS; SECONDARY GRADES; INSTRUCTIONAL AIDS

Developed by a committee of teachers, supervisors, and educators, these transparency masters are for use in preparing instructional aids for high school classes of home economics. Students should be third-year students or enrolled in a family living course. The 24 transparencies were designed as supplementary material for "Consumer Education, A Guide for Home Economics Teachers," available from the vocational education media center at Clemson University in South Carolina. Titles of the transparencies include: (1) The Consumer is the Focal Point of Our Economy, (2) Family Life Cycle, (3) Types of Resources, (4) Wanted: Financial Security, (5) Choose your Savings Plan Carefully, (6) Bases on Which Credit is Given, (7) Kinds of Credit Available to the Customer, (8) What Happens to the Customer Pay Check, (9) Why Budget, (10) Proper Care Means Longer Wear, (11) A Good Label Tells, (12) Getting Ready for a Baby, (13) Why Consumers Buy Health Insurance, (14) Types of Health Protection Available, (15) The Food and Drug Administration, (16) Wholesome Recreation is Available to Everyone, (17) Thinking About Renting, (18) Factors to Consider Before Selecting a Small Appliance, and (19) The Seven-Way Test of Buymanship. (DM)

VT 009 172
Homemaking Guide. Section III: Children. Homemaking 1966-1.

Oakland Public Schools, Calif. MF AVAILABLE IN VT-ERIC SET. Oakland Public Schools, 1025 Second Avenue, Oakland, California 94606 (\$1.30). Pub Date - 66 105p.

\*CURRICULUM GUIDES; \*HOME ECONOMICS EDUCATION; \*CHILD DEVELOPMENT; \*CHILD CARE; SECONDARY SCHOOLS; CONCEPT FORMATION; FUNDAMENTAL CONCEPTS

Developed by a curriculum committee of homemaking teachers and field tested in 23 junior and senior high schools, this guide is for teacher use in conducting a course in child development and care for grades 7 through 12. It is designed to help acquaint the student with basic concepts relating to child development by



presenting major generalizations supporting these concepts. The content includes objectives of the course, student attitudes to be developed, recommended experiences for learning about children, and observation procedures. Suggested activities aimed at development of such basic concepts as a child's needs for security, care, respect, and understanding are presented in outline form, specifically selected for each grade level. The teacher should be a home economist or child development specialist and students should be selected for interest and readiness. Supplementary materials include 1966 research findings and a list of related references. The course length may be adapted to meet the needs and interests of the class. (AW)

VT 009 193 Troskey, Mary C. Guide for Training Homemakers.

Illinois State Dept. of Children and Family Services. Div. of Child Welfare MF AVAILABLE IN VT-ERIC SET. Pub Date - Aug68 73p.

\*CURRICULUM GUIDES; \*HOME ECONOMICS EDUCATION; \*OCCUPATIONAL HOME ECONOMICS; \*VISITING HOMEMAKERS; \*HOMEMAKING SKILLS; INSERVICE COURSES; LESSON PLANS; ADULT VOCATIONAL EDUCATION; SERVICE OCCUPATIONS; SOCIAL SERVICES

Prepared by a state supervisor of homemaker service, this guide is designed to aid teachers in planning courses and lessons for inservice training programs for homemakers. Its primary objectives are to give trainees: (1) a basic understanding of the homemaker's role and the various duties required of her, (2) an opportunity to acquire the skills and knowledge necessary, and (3) basic rules for home safety and health care. The following topics are covered, in outline form: (1) History and Philosophy of Social Welfare, (2) Personnel Policies and Procedures, (3) Families Served, (4) The Homemaker on the Job, (5) Understanding People, (6) Food in Family Life, (7) Housekeeping Functions, (8) Safety and First Aid in the Home, (9) Health Care for Families, and (10) Understanding Children. The outlines present purposes, content, suggested learning, experiences, and, in most cases, recommended references and films illustrating the topic. Instructors of the 20-hour course must be high school graduates and subject-matter specialists, and trainees should be mature women with at least 10th grade education. (AW)

 $\frac{\text{VT 009 268}}{\text{Resource Guide, Housing and Home Furnishings.}}$ 

Fiorida State Dept. of Education, Tallahassee. Div. of Vocational, Technical, and Adult Education MF AVAILABLE IN VT-ERIC SET.

Department of Education, Home Economics Section, 450 TB and T Building, Tallahassee, Florida 32304. Pub Date - Aug64 162p.

RESOURCE GUIDES; TEACHING GUIDES; \*CURRICULUM GUIDES; \*HOME ECONOMICS EDUCATION; \*HOUSING; \*HOME FURNISHINGS; SECONDARY GRADES; INSTRUCTIONAL MATERIALS; LESSON PLANS; BIBLIOGRAPHIES; REFERENCE MATERIALS; VISUAL AIDS

Developed in graduate workshops and classroom tested prior to revision and publication, this resource guide is for use by high school home economics teachers in planning and conducting classes in housing and home furnishings. The content consists of two course outlines, one organized for a comprehensive, 4- to 6-week period of study, and the other for a more detailed semester program designed for older high school students. Both relate to five general areas of study: (1) people and housing, (2) selection of housing, (3) selection of home furnishings for an attractive setting, (4) care and maintenance of the home, and (5) employment opportunities and possibilities in the field of housing. For each area of study suggested teaching plans include: (1) teacher objectives, (2) questions to be answered, (3) generalizations, principles and understandings to be developed, (4) suggested learning experiences, (5) resources, and (6) suggested evaluation techniques. An extensive bibliography of references, visual aids and related fiction is included. Course teachers should have home economics certification. (AW)

VT 009 290
In-Betweens: A Curriculum Guide for Home Economics Teachers of Students with Special Learning Needs.

Ohio State Dept. of Education, Columbus. Div. of Vocational Education MF AVAILABLE IN VT-ERIC SET.
Ohio Trade and Industrial Education Service, Instructional Materials Laboratory, The Ohio State University, 1885 Neil Avenue, Columbus, Ohio 43210.
Pub Date - 69 133p.

\*CURRICULUM GUIDES; \*TEACHING GUIDES; \*HOME ECONOMICS EDUCATION; \*SLOW LEARNERS; \*LOW ABILITY STUDENTS; SECONDARY GRADES

Developed by teachers and teacher educators, this curriculum guide is for use by teachers and administrators in planning and implementing secondary level home economics programs and courses for slow learners. An introductory section of questions and reflections is intended to aid the teacher in realizing the significance of her role in conducting a class of students with special learning needs. The major portion of the guide is composed of topical outlines covering the areas of: (1) Personal and Family Development, (2) Housing, (3) Home Care, (4) Food and Nutrition, (5) Clothing, and (6) Games for Learning. Each outline provides content, suggested learning activities, supplementary experiences and special considerations, and generalizations. To furnish examples for the teacher in communicating with slow learners, the vocabulary used for the entire work is at approximately fourth grade level, except for some higher level words which are defined in the glossary. Quizzes, pretests, attitude and occupational checkists, vocabulary checks, and personal habit checksheets are appended. The guide is illustrated with line drawings. A certified vocational home economics teacher should conduct the course. (AW)



INDUSTRIAL ARTS
EDUCATION
SECTION

VT 001 686 Industrial Arts Electricity-Electronics, Grades 7-12. Course Guide.

Texas Industrial Arts Association
Texas Education Agency, Austin
MF AVAILABLE IN VT-ERIC SET.
Texas Education Agency, 201 East Eleventh, Austin, Texas 78712 (\$.20).
Pub Date - Oct66 56p.

\*CURRICULUM GUIDES; \*INDUSTRIAL ARTS; \*ELECTRICITY; \*ELECTRONICS; SECONDARY GRADES; EDUCATIONAL FACILITIES

This curriculum guide was developed by state supervisors and teacher educators to provide teachers with information useful in organizing and teaching electricity and electronics in industrial arts. "Introductory Electricity" outlines a curriculum for Grades 7 or 8 which has no prerequisite and which can be one or two semesters in length. "General Electricity" outlines a curriculum which may be used in Grade 9, 10, 11, or 12 in which the first semester serves as a prerequisite for the second semester. "Basic Electronics" outlines a curriculum for grades 10, 11 or 12 which requires "General Electricity" as a prerequisite and the first semester as a prerequisite for the second. Course objectives, instructional organization and materials, and course outlines are given for each of these levels. Supplementary materials include: (1) outline for plan sheet, (2) facilities recommendations, (3) equipment list, (4) shop floor plans, and (5) selected bibliography of textbooks. (EM)

VT 005 914 Instructor's Guide for Printing 1 and 2. Curriculum Bulletin No. 11.

Tulsa Public Schools, Okla. Div. of Instruction MF AVAILABLE IN VT-ERIC SET. Tulsa Public Schools, P.O. Box 45208, Tulsa, Oklahoma 74145 (\$1.50). Pub Date - 63 119p.

\*TEACHING GUIDES; \*CURRICULUM GUIDES; \*INDUSTRIAL EDUCATION; \*GRAPHIC ARTS; \*PRINTING; SECONDARY GRADES

Prepared by a teacher committee and classroom tested for two years prior to publication, this guide is for use by high school industrial arts or vocational industrial education teachers in planning and implementing lessons in printing and lithography. The content is divided into six sections, the first four of which deal with the more theoretical aspects of the subject matter, and the last two, with practical applications. Major areas covered are: (1) The Place of Printing in the High School Curriculum, dealing with objectives and overall value of graphic arts, (2) Organization to Attain Objectives, concerned with selection and organization of projects and jobs, (3) Teaching Printing Classes in Senior High School, covering safety, job relations, and problem handling, and (4) Course Outline for Printing I and II, including skills and processes to be developed and understood, related and technical information, suggested methods of presentation, and methods of evaluation. Other sections include suggested jobs and projects to be done, information sheets for students, and texts. Recommended course length is 180-360 hours as a high school industrial arts program, and 540-1,080 hours if taught in a vocational school. The instructor should have certification in the subject area and job experience. (AW)

VT 005 915
Instructor's Guide for Senior High School Woodwork in the Tulsa Public Schools (Tentative). Curriculum Bulletin No. 12.

Tuisa Public Schools, Okla. Div. of Instruction MF AVAILABLE IN VT-ERIC SET.
Tulsa Public Schools, P.O. Box 45208, Tulsa, Oklahoma 74145 (\$1.50). Pub Date - 67 135p.

\*TEACHING GUIDES; \*CURRICULUM GUIDES; \*INDUSTRIAL ARTS; \*WOODWORKING; \*LESSON PLANS; SENIOR HIGH SCHOOLS; SECONDARY GRADES

Prepared by a committee of senior high school woodworking teachers, this guide is for use by industrial arts instructors in planning high school level courses and lessons in woodworking. It is designed to serve as resource material in developing a program of woodworking as well as to assist the teacher in preparing and presenting daily work. Contents include: (1) general information on the place of industrial arts, and specifically woodworking, in the senior high school, (2) general principles of personnel organization and management in the shop, (3) a unit providing teaching suggestions, practical work suggestions, procedures, related studies, instructor's guide sheets, safety hints, and a bibliography, (4) two sections, 'Woodwork I and II" and 'Woodwork III and IV," which give specific teaching outlines including classroom procedures, project planning, skills and processes to be developed, technical information and teaching aids, and suggested projects, (5) a section containing sample lesson plans, and (6) a section on student evaluation, including a list of suggested tests. A certified woodworking teacher should conduct the 180-360 hour course. Students should have an interest and aptitude in woodworking. Additional texts and references should be used in presenting the material. (AW)

The New Mexico State Planning Guide for Industrial Arts.

New Mexico Industrial Arts Association New Mexico State Dept. of Education, Santa Fe MF AVAILABLE IN VT-ERIC SET. Pub Date - 63 154p.

\*STATE CURRICULUM GUIDES; \*INDUSTRIAL ARTS: RESOURCE MATERIALS; \*EDUCATIONAL PLANNING NEW MEXICO

This planning guide, meant as an aid in establishing efficient industrial arts instruction in New Mexico, is for use by teachers, administrators, and counselors. Major sections of the guide are (1) Introduction, (2) Objectives of Industrial Arts, (3) Personnel Management, (4) Safety in the School Shop, and (5) Content. The latter section contains 30 brief outlines suggesting content for courses in drafting, electricity, graphic arts, mechanics, woodworking, metalworking, and crafts. Included with the outlines are objectives, necessary materials, suggested projects, and instructional aids. A philosophical statement concerning the state's industrial arts program is included. (EM)

VT 006 462 Industrial Arts Teachers' Handbook.



Rochester City School District, N.Y.
MF AVAILABLE IN VT-ERIC SET.
Rochester City School District, 13 South Fitzhugh Street, Rochester, New York 14614 (\$.90).
Pub Date - 64 51p.

\*INDUSTRIAL ARTS; \*TEACHING GUIDES; SECONDARY GRADES; SCHOOL SAFETY; SCHOOL SHOPS; TEACHER RESPONSIBILITY; \*ADMINISTRATIVE POLICY \*ROCHESTER CITY SCHOOL DISTRICT; NEW YORK

This handbook was designed as a source of information for secondary industrial arts teachers in lesson planning and shop organization. It was developed by a curriculum group and tested over a 2-year period. It was developed by a curriculum group and tested over a 2-year period. The content objectives are to acquaint teachers with their professional responsibilities, their classroom responsibilities, safety rules of the shop, and administrative policies and procedures. This is a printed document with samples of recording forms, evaluation tests for teachers and students, and safety check lists. Supplemental materials include a list of eye protective devices, suggested safety markers, and order forms. (GR)

VT 006 598
Drafting I. Student Problems.

Rochester City School District, N.Y.
MF AVAILABLE IN VT-ERIC SET.
Rochester City School District, 13 South Fitzhugh Street, Rochester, New York 14614 (\$1.00).
Pub Date - 65 57p.

\*RESOURCE GUIDES; \*INDUSTRIAL ARTS; STUDENT PROJECTS; SECONDARY GRADES; \*DRAFTING; TRANSPARENCIES

This resource guide is for teacher use in planning a course for high school drafting. The content objectives are to develop skills and understanding required in: (1) 2-view orthographic projection, (2) 3-view orthographic projection, (3) auxiliary views, (4) sectional views, (5) detail and assembly drawing, (6) pattern developments, and (7) pictorial drawings - isometric. This document is illustrated with 33 line drawings which may be reproduced as student assignments or for use as overhead transparencies. Each drawing states the problem, directions, and references used. (GR)

VT 006 650 General Metal Work 1 and 2. Course of Study.

Rochester City School District, N.Y. Industrial Arts Dept.
MF AVAILABLE IN VT-ERIC SET.
Rochester City School District, 13 South Fitzhugh Street, Rochester, New York 14614 (\$1.15).
Pub Date - 64 72p.

\*INDUSTRIAL ARTS; \*CURRICULUM GUIDES; \*METAL WORKING OCCUPATIONS; \*METALS; SECONDARY GRADES; COURSE OBJECTIVES; BIBLIOGRAPHIES; INSTRUCTIONAL MATERIALS; STUDENT PROJECTS ROCHESTER; NEW YORK

This program guide is for teacher use in planning and operating a local metalworking program consisting of two 180-hour courses, General Metalwork 1, a beginning course, and General Metalwork 2, an advanced course. They were developed by an industrial arts curriculum committee to provide uniformity of offerings for a city-wide program. Major units of General Metalwork 1 are (1) Art Metal, (2) Tool Operation, (3) Wrought Iron and Forging, (4) Weiding Arc and Gas, (5) Sheet Metal, and (6) Foundry, while major units of General Metalwork 2 are: (1) Art Metal, (2) Machine Tool Operations, (3) Heat Treatment, (4) Welding, and (5) Sheet Metal. Each section has been divided into individual units of instruction with each listing the things that a student should be able to do, the things a student should understand, and a list of suggested activities to bring about the desired learnings. At the end of each unit, suggested demonstrations and related lessons are listed. Supplemental materials include units on health and safety, citizenship, avocational pursuits, and an extensive bibliography of references. (GR)

VT 006 765 Graphic Arts 1 and 2. Course of Study.

Rochester City School District, N.Y. Industrial Arts Dept.
MF AVAILABLE IN VT-ERIC SET.
Rochester City School District, 13 South Fitzhugh Street, Rochester, New York 14614 (\$1.30).
Pub Date - 64 77p.

\*INDUSTRIAL ARTS; \*CURRICULUM GUIDES; SECONDARY GRADES; BIBLIOGRAPHIES; INSTRUCTIONAL MATERIALS; STUDENT PROJECTS; \*GRAPHIC ARTS; \*PRINTING

This program guide is for teacher use in planning and operating a graphic arts program consisting of two 40-week courses: Graphic Arts 1, a beginning course, and Graphic Arts 2, an advanced course. They were developed by an industrial arts curriculum committee to provide uniformity of offerings for a city-wide program. Major units of Graphic Arts 1 are: (1) Introduction, (2) Layout, (3) Hand Composition, (4) Relief Printing (letterpress, linoleum cuts, rubber stamp), (5) Printing Inks, (6) Stockwork, (7) Bookbinding, (8) Silkscreen, (9) Photography, (10) Related Material (paper), and (11) Vocabulary. Major units of Graphic Arts 2 are: (1) Introduction, (2) Hand Composition, (3) Layout, (4) Copy Preparation, (5) Imposition, (6) Photography, (7) Offset Printing, (8) Silk Screen, (9) Bookbinding, (10) Paper Making, (11) Related Information (machine composition, presswork, process report, product report, occupational report), and (12) Vocabulary. Each unit lists the things that a student should be able to do, the things he should understand, and a list of suggested activities. Supplemental materials include units on health and safety, citizenship, avocational pursuits, a film list and a bibliography of references. The document is illustrated with photographs. (GR)

VT 007 844 ED 031 554 Units for the Laboratory of Industries.

Gorham State Coll., Maine
Office of Education (DHEW), Washington, D.C.
EDRS PRICE MF-\$2.00 HC-\$24.40
Pub Date - Aug68 486p.; Materials developed at an NDEA Institute (Gorham, Maine, July 1-AUGUST 9, 1968).

\*UNITS OF STUDY (SUBJECT FIELDS); \*MANUFACTURING INDUSTRY; \*INDUSTRIAL ARTS; \*LESSON PLANS; \*SECONDARY GRADES; SUMMER INSTITUTES; CURRICULUM DEVELOPMENT; INSTRUCTIONAL MATERIALS; UNIT PLAN; TEACHING GUIDES; RESOURCE MATERIALS; EDUCATIONAL FACILITIES; RECORDS (FORMS); TRANSPARENCIES; TESTS; LEARNING ACTIVITIES; INDUSTRIAL STRUCTURE



\*NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

This institute focused on manufacturing industries for junior high industrial arts. It was attended by 20 teachers from 14 states who worked in four groups to develop pairs of instructional units titled "Introduction to Technology and Industrial Arts." Each of these units covers personnel management, engineering, production, finance, and marketing and was to be suitable for a "Laboratory of Industries" approach. Included were purposes, pupil activities, suggested content, and an evaluation unit. These units were tested on 60 boys and girls and video tapes were made and evaluated by the participants. (EM)

VT 007 853 ED 031 555 Woodworking Technology.

San Diego State Coll., Calif. Industrial Arts Dept.
Office of Education (DHEW), Washington, D.C.
EDRS PRICE MF-\$1.00 HC-\$13.20
Pub Date - Aug68 262p.; Materials developed at NDEA Inst. for Advanced Study in Industrial Arts (San Diego, June 24-August 2, 1968).

\*UNITS OF STUDY (SUBJECT FIELDS); \*RESOURCE UNITS; \*INDUSTRIAL ARTS; \*WOODWORKING; LESSON PLANS; RESOURCE MATERIALS; LUMBER INDUSTRY; CURRICULUM DEVELOPMENT; INSTRUCTIONAL MATERIALS; SUMMER INSTITUTES; TEACHING GUIDES; LEARNING ACTIVITIES \*NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE; WOODWORKING TECHNOLOGY

Six teaching units which were developed by the 24 institute participants are given. "Wood Identification and Chemistry" covers the physical properties and structural features of hardwoods and softwoods. "Seasoning" explains air drying, kiln drying, and seven special lumber seasoning processes. "Research on Laminates" describes the bending of solid wood and wood laminates, beam lamination, lamination adhesives, and plastic laminates. "Particleboard: A Teaching Unit" explains particleboard manufacturing and the several classes of particleboard and their uses. "Lumber Merchandising" outlines lumber grades and some wood byproducts. "A Teaching Unit in Physical Testing of Joints, Finishes, Adhesives, and Fasteners" describes tests of four common edge joints, finishes, wood adhesives, and wood screws. Each of these units includes a bibliography, glossary, and student exercises. (EM)

VT 007 857 ED 031 556 Laminating and Bending; A Base Syllabus on Wood Technology.

Eastern Kentucky Univ., Richmond EDRS PRICE MF-\$0.50 HC-\$3.25 Pub Date - Aug68 63p.; From NDEA Inst. on Wood Technology (Eastern Kentucky Univ., June 10-Aug. 2, 1968).

\*CURRICULUM GUIDES; \*INDUSTRIAL ARTS; \*WOODWORKING; TEACHER EDUCATION; SUMMER INSTITUTES; \*RESOURCE MATERIALS; MANUFACTURING; LUMBER INDUSTRY; TEACHER DEVELOPED MATERIALS; CURRICULUM DEVELOPMENT; INSTRUCTIONAL IMPROVEMENT \*NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

Prepared by participants in the 1968 National Defense Education Act Institute on Wood Technology, this syllabus is one of a series of basic outlines designed to aid college level industrial arts woodworking instructors in improving and broadening the scope and content of their programs. The manual consists of a brief introduction followed by seven major unit topics, including: (1) Laminated Timbers, (2) Kerf Binding, (3) Bending of Plywood, (4) Bending Steamed or Boiled Wood, (5) Lamination Bending, (6) Bag Moulding of Plywood, and (7) Anhydrous Ammonia Bending. Most units contain descriptive and explanatory information objectives, content outlines, drawings and diagrams, suggested procedures, and uses of the materials produced. Supplementary materials include a list of films and filmstrips, a glossary, a bibliography, and reference and instructional aids. Related documents are available as ED 031 557, ED 031 558, ED 031 559, and ED 031 560 (VT 007 858, VT 007 859, VT 007 860, and VT 007 861, respectively, all in this issue). (AW)

VT 007 858 ED 031 557
Adhesives; A Base Syllabus on Wood Technology.

Eastern Kentucky Univ., Richmond EDRS PRICE MF-\$0.50 HC-\$3.60 Pub Date - Aug68 70p.; From NDEA Inst. on Wood Technology (Eastern Kentucky Univ., June 10-Aug. 2, 1968).

\*CURRICULUM GUIDES; \*INDUSTRIAL ARTS; \*ADHESIVES; SUMMER INSTITUTES; CURRICULUM DEVELOPMENT; \*WOODWORKING; \*RESOURCE MATERIALS; TEACHER DEVELOPED MATERIALS; INSTRUCTIONAL IMPROVEMENT; TEACHER EDUCATION \*NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

Prepared by participants in the 1968 National Defense Education Act Institute on Wood Technology, this syllabus is one of a series of basic outlines designed to aid college level industrial arts instructors in improving and broadening the scope and content of their programs. The guide is divided into three sections, the first of which deals with the types and characteristics of adhesives and includes a discussion of each of the important adhesives. Unit II is concerned with application, clamping, and curing of adhesives, and contains excerpts from articles on glues and adhesives, drawings, and photographs to illustrate the material covered. The third unit is a discussion of adhesive bond tests and the techniques for conducting them. Supplementary materials included are a glossary, a bibliography, and an appendix listing glue and adhesive manufacturers. Related documents are available as ED 031 556, ED 031 558, ED 031 559 and ED 031 560 (VT 007 857, VT 007 859, VT 007 860, and VT 007 861, respectively, all in this issue). (AW)

VT 007 859 ED 031 558
Lumber and Related Products; A Base Syllabus on Wood Technology.

Eastern Kentucky Univ., Richmond EDRS PRICE MF-\$0.50 HC-\$5.50 Pub Date - Aug68 108p.; From NDEA Inst. on Wood Technology (Eastern Kentucky Univ., June 10-Aug. 2, 1968).

\*CURRICULUM GUIDES; \*INDUSTRIAL ARTS; LUMBER INDUSTRY; \*BUILDING MATERIALS; \*WOODWORKING; CURRICULUM DEVELOPMENT; SUMMER INSTITUTES; TEACHER EDUCATION; \*RESOURCE MATERIALS; TEACHER DEVELOPED MATERIALS; INSTRUCTIONAL IMPROVEMENT \*NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

Prepared by participants in the 1968 National Defense Education Act Institute on Wood Technology, this syllabus is one of a series of basic outlines designed to aid college level industrial arts instructors in improving and broadening the scope and content of their programs. The primary objective of this course outline is to point out the importance and the many uses of wood and wood products. Topics covered are: (1) Lumber Grades and Sizes, (2) Plywood, (3) Veneer, (4) Fiberboard, (5) Particleboard, (6) Sheetboard, (7) Insulation



207

Board, (8) Structural Sandwich Construction, (9) Shingles, (10) Pulp and Paper, (11) Wood Flour, and (12) Cellulose-Derived Products. Most units contain information on manufacturing processes, properties, types and grades, and uses of the products. Selected bibliographies are listed for each unit. The final section provides instructional aids, suggested projects and student activities, and materials and equipment needed for specific projects. The document is illustrated with drawings, charts, and photographs. Related documents are available as ED 031 556, ED 031 557, ED 031 559, and ED 031 560 (VT 007 857, VT 007 858, VT 007 850, and VT 007 861, respectively, all in this issue). (AW)

VT 007 860 ED 031 559 Wood Substitutes; A Base Syllabus on Wood Technology.

Eastern Kentucky Univ., Richmond EDRS PRICE MF \$0.50 HC-\$3.00

Aug68 58p.; From NDEA Inst. on Wood Technology (Eastern Kentucky Univ., June 10-Aug. 2, 1968). Pub Pate -

\*CURRICULUM GUIDES; \*INDUSTRIAL ARTS; \*WOODWORKING; TEACHER EDUCATION; \*RESOURCE MATERIALS; SUMMER INSTITUTES; TEACHER DEVELOPED MATERIALS; CURRICULUM.DEVELOPMENT; INSTRUCTIONAL IMPROVEMENT \*NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE; WOOD SUBSTITUTES

This curriculum guide is for use by college instructors concerned with expanding traditional woodworking programs. It was developed in a National Defense Education Act summer institute and is based on an outline provided by members of a previous institute. The content concerns wood substitutes which are mark to resemble wood and are often used with wood but contain no wood or wood products. Units are (1) The Manufacture of High Pressure Plastic Laminate, (2) Vinylwood Veneers, (3) Vinyl Wrapped Wood Substitutes, (4) Wood Grain Reproduction on Wood and Other Materials, and (5) High Pressure Molded Products. Each unit contains information relative to the development, use, and production of the wood substitutes and a reference bibliography. Related documents are available as ED 031 556, ED 031 557, ED 031 558, and ED 031 560 (VT 007 857, VT 007 858, VT 007 859, and VT 007 861, respectively, all in this issue). (EM)

ED 031 560 Wood Properties and Kinds; A Base Syllabus on Wood Technology.

Eastern Kentucky Univ., Richmond EDRS PRICE MF-\$0.75 HC-\$6.60 Pub Date - Aug68 130p.; From NDEA Inst. on Wood Technology (Eastern Kentucky Univ., June 10-Aug. 2, 1968).

\*CURRICULUM GUIDES; \*INDUSTRIAL ARTS; \*PLANT SCIENCE; PLANT GROWTH; LUMBER INDUSTRY; TREES; SUMMER INSTITUTES; PLANT IDENTIFICATION; BUILDING MATERIALS; \*WOODWORKING; CURRICULUM DEVELOPMENT; TEACHER EDUCATION; \*RESOURCE MATERIALS; TEACHER DEVELOPED MATERIALS; INSTRUCTIONAL IMPROVEMENT; LEARNING ACTIVITIES \*NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

Prepared by participants in the 1968 National Defense Education Act Institute on Wood Technology, this syllabus is one of a series of basic outlines designed to aid college level industrial arts instructors in improving and broadening the scope and content of their programs. This booklet is concerned largely with the physical composition and behavior of wood and the factors influencing its utilization. Headings of the five major units are: (1) Wood, What It Is, (2) The Plant Origin of Wood, (3) Gross Features of Wood, (4) Natural Defects in Wood, and (5) The Identification of Wood. A section of experiments, including teaching aids, equipment needed, sample test questions, suggested student problems and projects, and references, presents information on such properties of wood as density and specific gravity, moisture content, strength characteristics, and structure. The guide is illustrated throughout with drawings, diagrams, photographs, tables, and graphs. A glossary and bibliography are included. Related documents are available as ED 031 556, ED 031 557, ED 031 558, and ED 031 559 (VT 007 857, VT 007 858, VT 007 859, and VT 007 860, respectively, all in this issue). (AW)

VT 008 <u>268</u> Safety Education in the School Shop.

Gorham State Teachers Coll., Maine. Industrial Arts Dept. MF AVAILABLE IN VT-ERIC SET. Pub Date -65 68p.

\*RESOURCE MATERIALS; \*INDUSTRIAL ARTS; SECONDARY GRADES; \*SCHOOL SAFETY; \*SCHOOL SHOPS

This safety manual is for use by industrial arts teachers. It was developed by 17 teachers enrolled in a summer course. The major portion of the document is devoted to 35 check lists of safety practices for jurand senior high school students. General safety regulations and precautions are also discussed. (EM)

VT 008 269 ED 026 273

Feirer, John L. Space Resources for the High School. Industrial Arts Resource Units.

National Aeronautics and Space Administration, Washington, D.C. EDRS PRICE MF - \$0.75 HC - \$8.80

National Aeronautics and Space Administration, Washington, D.C. 20546. Pub Date - Apr67 174p.

\*RESOURCE GUIDES; \*TEXTBOOKS; \*INDUSTRIAL ARTS; \*AEROSPACE TECHNOLOGY; SECONDARY GRADES; TEACHER EDUCATION; STUDENT PROJECTS; REFERENCE MATERIALS; \*AEROSPACE INDUSTRY; AUDIOVISUAL AIDS; CONFERENCES A SPACE TECHNOLOGY CONFERENCE FOR INDUSTRIAL ARTS EDUCATORS, INDIAN HARBOUR BEACH, FLORIDA, MAY 3-6, 1966

This resource guide is for use by industrial arts teachers, supervisors, and teacher educators. It was prepared by a representative committee of educational leaders for the National Aeronautics and Space Administration (NASA). The purpose is to provide teachers with specific suggestions on ways and means that Administration (NASA). The purpose is to provide teachers with specific suggestions on ways and means that space related content elements may be fused into industrial arts courses; some ideas are in the form of units and some are student activities. Unit titles are: (1) The Aerospace Industry--An Overview, (2) Products and Materials, (3) Aerospace Occupations, (4) Design and Drafting, (5) Metals, (6) Electricity-Electronics, (7) Power (8) Graphic Arts, (9) Plastics, (10) Ceramics, (11) Woods, and (12) New Directions. Each unit has a bibliography of NASA Technical Briefs, NASA Special Publications, and representative commercial textbooks. References are coded by unit and type. Photographs, line drawings, procedure lists, and material lists accompany most projects. The NASA Educational Programs Division's services, a film list, and a conference program and participant list for "A Space Technology Conference for Industrial Arts Educators" are appended. (EM)

Handbook for Industrial Arts Education.



Missouri State Dept. of Education, Jefferson City MF AVAILABLE IN VT-ERIC SET. Pub Date - 69 91p.

\*PROGRAM GUIDES; \*INDUSTRIAL ARTS; \*INDUSTRIAL ARTS TEACHERS; ELEMENTARY GRADES; SECONDARY GRADES; TEACHER EDUCATION MISSOURI

This handbook is for use by teachers, professors, and administrators of industrial arts programs. It was developed by a committee within the Missouri Council for Industrial Arts Education. Major parts are titled:
(1) Introduction to Industrial Arts Education, (2) The Industrial Arts Curriculum, (3) Implementing the Curriculum, (4) Professional Growth, and (5) Industrial Arts History, Teacher Education, and Certification. The primary focus is on elementary and secondary industrial arts; however, there is considerable material on college programs, teacher certification, and professional associations. A glossary, organizational charts, sample forms, equipment depreciation information, school shop safety inspection list, and student progress chart are appended. (EM)

VT 008 328
Suggested Related Information for the Metal Area. Industrial Arts Comprehensive General Shop Course.

State Univ. of New York, Albany. Bureau of Industrial Arts Education MF AVAILABLE IN VT-ERIC SET.
Pub Date - 61 156p.

\*STUDY GUIDES; \*INDUSTRIAL ARTS; \*INDUSTRIAL ARTS TEACHERS; TEACHER EDUCATION \*RELATED INSTRUCTION

This study guide is for use by industrial arts teachers during a course on the role of related instruction in junior high school general shops. Each of the 68 lesson guides includes an introduction, objectives, references, assignments, and test items. Some of the lessons are: (1) Planning, (2) Social Economics, (3) Guidance, (4) Science, (5) Safety and Hygiene, and (6) Consumer Values. This is an edited reprint of the 1949 edition. (EM)

VT 008 537
Vocational Industrial Drafting. A Teacher's Outline for Use in Organization and Management of Instruction.

Mississippi State Dept. of Education, Jackson. Curriculum Lab. MF AVAILABLE IN VT-ERIC SET. Curriculum Laboratory, Box NU, State College, Mississippi 39762 (\$1.50). Pub Date - Apr69 87p.

\*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*DRAFTSMEN; GRADE 11; GRADE 12

This curriculum guide is for use by teachers of vocational drafting courses. It was developed by a committee of secondary teachers and edited by the staff of a curriculum materials laboratory. Outlines are provided for (1) Fundamentals of Drafting, (2) Sheet Metal Drafting, (3) Drafting Media and Reproduction, (4) Machine Drafting, (5) Architectural Drafting, (6) Topographical Drafting and (7) Structural Drafting. Supplementary materials include sample instructional sheets and information about the survey on which this guide is based. Teachers should be certified vocational teachers and students should have an expressed interest in drafting as a vocation. (EM)

VT 008 733
Duffy, Joseph W.
Power: Prime Mover of Technology. Laboratory Manual.

DOCUMENT NOT AVAILABLE FROM EDRS.

McNight and McNight Publishing Co., Route 66 and Towarda Avenue, Bloomington, Illinois 61701.

Pub Date - 65 144p.

\*LABORATORY MANUALS; \*INDUSTRIAL ARTS; \*STUDENT PROJECTS; \*LABORATORY EXPERIMENTS; INDIVIDUALIZED INSTRUCTION; \*POWER MECHANICS; INDUSTRIAL TECHNOLOGY; SECONDARY GRADES; ENGINES; ELECTRIC MOTORS; ENERGY

Compiled by an associate professor of industrial arts, this laboratory manual is for use by high school industrial arts students engaged in a study of power and its role in technology. It is divided into two major sections, the first of which is a group of 20 study units keyed to the chapters of the textbook, "Power--The Prime Mover of Technology." The second section is comprised of 22 activities and performance problems relating to the information covered in part one. The contents of both sections are grouped under the major topics: (1) Direct Manual Converters, (2) External Combustion Converters, (3) Internal Combustion Converters, (4) Conventional Electrical Converters, and (5) Direct Electrical Converters. Perforated pages make the study units easily detachable so that they may be turned in to the instructor or included in student reference notebooks. The problem section provides for activities in experimentation, model preparation, and design and construction of power converters. Students should select and utilize these according to their own interests and abilities. Supplementary materials include tables of decimal equivalents, trigonometric functions, periodic table of chemical elements, list of chemical elements and symbols, and selected references for each major topic. The related teacher's manual is available as VT 008 734, in this issue. (AW)

VT\_008 734

Duffy, Joseph W.
Power: Prime Mover of Technology. Teacher's Manual.

DOCUMENT NOT AVAILABLE FROM EDRS.
McNight and McNight Publishing Co., Route 66 and Towarda Avenue, Bloomington, Illinois 61701.
Pub Date - 65 141p.

\*CURRICULUM GUIDES; \*COURSE ORGANIZATION; \*INDUSTRIAL ARTS; INDUSTRIAL TECHNOLOGY; SECONDARY GRADES; STUDENT PROJECTS; INDIVIDUALIZED INSTRUCTION; \*POWER MECHANICS; ENERGY

This teacher's manual is designed to aid the high school industrial arts teacher in organizing and implementing a course in power technology. Written by an associate professor of industrial arts, the manual provides a suggested course outline and shop layout, as well as a compilation of scientific and technological information to be used selectively by the instructor to meet the needs and abilities of the class and the individual students. General objectives of the course are to acquaint students with (1) basic scientific principles of power, (2) industrial uses of power, (3) conversion of energy from one form to another, (4) socio-economic implications of power technology, (5) related industrial and occupational areas, and (6) related principles



in mathematics and science. Units are presented on: (1) Machines, (2) Heat As a Form of Energy, (3) Steam and Heat Engines, (4) Internal Combustion and Heat Engines, (5) Gas Turbines and Thrust, (6) Rockets, (7) Electricity, (8) Magnetism, and (9) Alternating Current. Sections on Facilities, including equipment and machinery, and Audio-Visual Materials are also included. The manual is illustrated with photographs, charts, graphs, and diagrams. The related student laboratory manual is available as VT 008 733 (in this issue). (AW)

VT 000 872 Industrial Arts Curriculum Guide: Industrial Arts, 1968-1969.

Orange County School Board, Orlando, Fla. Florida State Dept. of Education, Tallahassee MF AVAILABLE IN VT-ERIC SET. Pub Date - 69 109p.

\*CURRICULUM GUIDES; \*INDUSTRIAL ARTS; JUNIOR HIGH SCHOOLS; \*COMMUNICATIONS; \*MANUFACTURING; \*POWER MECHANICS; COURSE CONTENT; COURSE ORGANIZATION; LEARNING ACTIVITIES; INSTRUCTIONAL AIDS; EDUCATIONAL FACILITIES; EDUCATIONAL EQUIPMENT

Content for the junior high school industrial arts program presented in this curriculum guide was developed by a committee of teachers, state supervisors, and consultants through an analysis of the manufacturing, construction, communication, transportation, power, service, research, and management categories of American industry. A one semester course in communications introduces the 7th grade student to the ways and means by which man has employed and developed technology to aid him in better communication of ideas and information. The one semester 8th grade course in manufacturing introduces the student to the ways and means by which man obtains and changes the natural resources to produce his material welfare. The 9th grade full year course of study in power mechanics is designed to introduce the student to man's use of energy to produce power to make his work easier and to move himself and the things he produces. Course content topic titles outlined under the headings of Information Topics are intended to identify lessons or units of instruction to be prepared and presented. Other outline columns titled Student Activity, Teacher Notes, and Instructional Aids present information helpful in preparing lesson plans. Each course of study includes a suggested quality floorplan and a list of educational supplies and equipment. (HC)

VT 008 993
Woodworking: Vocational-Industrial Education Curriculum Guide.

Dallas Independent School District, Texas
MF AVAILABLE IN VT-ERIC SET.
Dallas Independent School District, 3700 Ross Avenue, Dallas, Texas 75204 (\$2.72).
Pub Date - 67 82p.

\*CURRICULUM GUIDES; \*INDUSTRIAL ARTS; \*WOODWORKING; \*SECONDARY GRADES; CURRICULUM PLANNING

Developed by a teacher curriculum specialist and tested for 1-year in monograph form before publication, this curriculum guide is for teacher use in planning a woodworking cluster for the senior and junior high school level. The content is comprised of six model woodworking courses covering grades 7 through 12. In the first two, the primary objectives are to help students determine whether or not their aptitudes and interests lie in woodworking and to acquaint them with basic woodworking skills. The last four units, on the high school level, are designed to assist the student in acquiring the technical knowledge, experience, and skills necessary for a career in woodworking. Each unit contains brief descriptive information, course objectives, suggested learning experiences and teaching methods, and selected references and audio-visual aids. The bulletin is illustrated with photographs. (AW)

VT 009 072 ED 031 594 Gebhart, Richard H. Developing American Industry Courses for the Secondary School.

Stout State Univ., Menomonie, Wis. EDRS PRICE MF-\$0.25 HC-\$1.75

OEC-5-85-060 BR-5-0058 08

American Industry Project, Stout State University, Monomonie, Wisconsin 54751 (single copies no charge). Pub Date - Mar68 33p.

\*INDUSTRIAL ARTS; \*HIGH SCHOOL CURRICULUM; \*CONCEPTUAL SCHEMES; \*PROGRAM DESCRIPTIONS; INDUSTRY; \*CURRICULUM DEVELOPMENT; COURSE DESCRIPTIONS; TEACHING GUIDES; MODELS; ILLUSTRATIONS; EDUCATIONAL INNOVATION; MATERIAL DEVELOPMENT; INSTRUCTIONAL MATERIALS; PROGRAM DEVELOPMENT; PROGRAM DESIGN \*PROJECT AMERICAN INDUSTRY

The construction of a conceptual framework of industry in the United States and the development of a completely new secondary curriculum, called American Industry, are reported. Major emphasis is placed on the need of the secondary school to aid all people in developing an understanding of American Industry, the procedure used in identifying those knowledges necessary to understand American Industry, the specification of behavioral objectives, the development of a logical course sequence, and the development of instructional materials for teacher and student. The project formally defined American Industry as "an institution in our society which, intending to make a mometary profit, applies knowledge and utilizes human and natural resources to produce goods or services to meet the needs of man." Models and illustrations accompany the narrative description of the development of the conceptual framework, the curriculum materials, and the general operating characteristics of the course. (CH)

VT 009 081
Barron, Lawrence, And Others
A Suggested Guide for Teaching Slow Learners in Industrial Arts in the Public Schools.

Maine State Dept. of Education, Augusta
MF AVAILABLE IN VT-ERIC SET.
State Department of Education, Bureau of Vocational Education, Education Building, Augusta, Maine 04330 (no charge).
Pub Date - Sep66 42p.

\*CURRICULUM GUIDES; \*INDUSTRIAL EDUCATION; \*LOW ABILITY STUDENTS; \*SLOW LEARNERS; SECONDARY GRADES; OCCUPATIONAL CLUSTERS; \*JOB SKILLS; BUILDING TRADES; AUTO MECHANICS; MANUFACTURING INDUSTRY; WELDERS

Developed through a workshop of high school industrial arts instructors and educational administrators, this guide is designed to aid high school industrial arts teachers in conducting special occupational classes for slow learners. The material is recommended for use with small classes of male students with I.Q.'s ranging



from 75-90. The content includes suggestions for teachers, a statement of objectives, and topical outlines of a variety of occupational skills to be taught from grades 7 through 12. Occupations outlined are: (1) production of home accessories (Grade 7), (2) building repairs and maintenance and small gas engine servicing (grade 9, two units), (3) industrial machining techniques (grade 10), (4) building trades (grade 11), and (5) automotive service station attendant (grade 12). No eighth grade program had been developed at time of publication. The mimeographed outlines provide brief descriptive information for each occupation, jobs to be performed, and essential related information. The subject matter should be used selectively to meet the needs of the group and the individual students. (AW)

VT 009 194 Senior High School Industrial Arts.

Winston-Salem/Forsyth County Schools, N.C. MF AVAILABLE IN VT-ERIC SET. Winston-Salem/Forsyth County Schools, P.O. Box 2513, Winston-Salem, North Carolina (\$3.00). Pub Date 67 219p.

\*INDUSTRIAL ARTS; \*CURRICULUM GUIDES; HIGH SCHOOLS; SECONOARY GRADES; COURSE OBJECTIVES; BIBLIOGRAPHIES; INSTRUCTIONAL MATERIALS; COURSE ORGANIZATION \*WINSTON SALEM FORSYTH COUNTY SCHOOLS; NORTH CAROLINA

This curriculum guide is for teacher use in course and lesson planning for high school industrial arts drafting, home planning, household mechanics, general shop, electricity and electronics, metalworking, and machine woodworking. The topical outline was developed by a committee of teachers and supervisors at the local level after a 2-year study of the curriculum. The content objectives are designed to improve the total instructional program and still provide flexibility to meet the needs of individual schools. The material for each course is designed for 180 school days of 55 minute periods with the exception of Home Planning and Household Mechanics which are 1-semester courses. Each course has been divided into units of instruction listing: (1) course description, (2) objectives, (3) scope of course, (4) assignments, (5) bibliography of references, and (6) equipment. Supplemental material includes a definition of and objectives for industrial arts. (GR)

VT 009 281
Interpreting Industry Through Line Production.

Maine State Dept. of Education, Augusta. Bureau of Vocational Education
Gorham State Teachers Coll., Maine. Industrial Arts Dept.
MF AVAILABLE IN VT-ERIC SET.
Industrial Arts Education, Maine State Department of Education, Education Building, Augusta, Maine 04330 (no charge).
Pub Date - nd 76p.

\*TEACHING GUIDES; \*INDUSTRIAL ARTS; \*JUNIOR HIGH SCHOOLS; \*MASS PRODUCTION; STUDENT PROJECTS; BIBLIOGRAPHIES; \*INDUSTRY; COURSE OBJECTIVES; INSTRUCTIONAL MATERIALS

This teaching guide, developed by college students, is for teacher use in course and lesson planning of line production techniques for grades 6 through 9 and requires five 50-minute classes for 9 weeks of study. Some units are: (1) objectives, (2) drawings of parts, (3) Jigs and fixtures, (4) procedure for manufacturing parts, (5) procedure for assembly, (6) bibliography, (7) tool list, (8) material and supply list, (9) teaching aids or devices, (10) list of films, (11) list of lessons to be taught, (12) safety check lists, (13) financial report for a model company, and (14) evaluation techniques. (GR)

VT 009 306
Loughran, Barnice B.; Bailey, Roger S.
Applied Design: Planning to Production and Principles and Elements. (Two Parts).

California State Polytechnic Coll., San Luis Obispo. Dept. of Education
California State Dept. of Education, Sacramento
DOCUMENT NOT AVAILABLE FROM EDRS.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$14.50 for 2 illustrated scripts and 2 filmstrips).
Pub Date - 68 52p.

\*FILMSTRIPS; \*SCRIPTS; \*INDUSTRIAL ARTS; \*DESIGN CRAFTS; \*ART APPRECIATION; SECONDARY GRADES; POST SECONDARY GRADES; ART EDUCATION; TEACHING GUIDES

These two illustrated manuals and their companion filmstrips were developed by college faculty in cooperation with high school teachers. Vocational teachers in high school and junior colleges may use these materials with students of average ability for one or two class periods of viewing and discussion. Principals and elements of good design are presented in a 42-frame filmstrip covering: (1) the value of good design, (2) poor design, (3) application of design principals, (4) elements of art, (5) improvement through design changes, and (6) good design gives long-lasting pleasure. The 52-frame filmstrip discussing planning to production includes: (1) planning a well-designed project, (2) designing wooden salad servers, (3) designing coffee mugs, (4) designing metal candle holders, and (5) designing wooden candlesticks for the lathe. Suggestions are given to the instructor for use in conducting discussion. Additional resource information would be desirable when studying this unit. (DM)

ERIC AFUIT EAST Provided by ERIC

TRADE AND INDUSTRIAL EDUCATION SECTION

VT 000 717
Schaefer, Carl J.
Plumbing Related Course for Apprentices, Part II, Learner's Manual.

Ohio State Dept. of Education, Columbus. Trade and Industrial Education Service MF AVAILABLE IN VT-ERIC SET. PLLM-2 Ohio Trade and Industrial Education Service, Instructional Materials Laboratory, The Ohio Staty University, 1885 Neil Avenue, Columbus, Ohio 43210 (\$1.25). Pub Date - 62 96p.

\*STUDY GUIDES; SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*PLUMBERS; \*PLUMBING; ADULT VOCATIONAL EDUCATION; \*APPRENTICESHIPS

This guide is for apprentice use in the study of related technical information for the plumbing trade. It was developed through consultation with trade committees and has been revised by subject matter specialists. The material is designed to enable instruction to be given on an individual or group basis without a rigid time table. Assignment sheets are used to provide the apprentice with lesson objectives, reading assignments keyed to six references, and study questions. Some of the 51 assignment sheets are: (1) Carpentry and Offsets, (2) Taking Off Quantities, (3) Using Specifications and Taking Off Quantities, (4) Boilers, (5) Vapor Heating, (6) Vacuum Systems, (7) Unit Heaters, and (8) Radiant Heat. Four review tests are spaced throughout the study guide to enable the apprentice to examine his knowledge of information covered in previous assignments. The teacher directing the study of apprentices should be a journeyman of the trade. The material in this document is a continuation of "Plumbing Related Course for Apprentices, Part I, Second Edition, Learner's Manual" (VT 000 715, AIM Summer 1969) and involves the application of information covered in that document. (HC)

VT 001 950 ED 023 786 Auto Mechanics; Methodology. Technical Instruction Manual.

Systems Operations Support, Inc., King of Prussia, Pa. Office of Education (DHEW), Washington, D.C. EDRS PRICE MF-\$0.50 HC-\$4.10

\* 0EG-1-6-000242-0618 BR-5-1332 80

Pub Date - Sep66 80p.

\*AUTO MECHANICS (OCCUPATION); \*TRADE AND INDUSTRIAL EDUCATION; \*PROGRAMED TEXTS; HIGH SCHOOLS; SEQUENTIAL APPROACH; \*ENGINES; MAINTENANCE; REPAIR; MOTOR VEHICLES

This student instruction manual was written in conformance with selected criteria for programed instruction books as developed previously for various military training courses. The manual was developed as a part of "A Study of the Effectiveness of a Military-Type Computer-Based Instructional System When Used in Civilian High School Courses in Electronics and Automechanics" available as ED 023 887 (VT 006 916, ARM Winter 1969). The material concentrates upon knowledge required for logical and systematic gathering of symptoms, analysis of these, and a logical step-by-step methodology of isolation to a section, a component, renewal and replacement or direct repair of the component, and then an operational check to determine that the automobile will perform satisfactorily. Subject matter areas and sub-topics include (1) ignition system, functional description and components of the ignition system, (2) fuel system, purpose of the fuel system, functional descriptional combination requirements, (3) engine analysis, basic starting tests and detailed tests for hard starting, and (4) tune-up procedures, types of test equipment, engine tune-up, and road testing. The activities included are those which can benefit the most from a systematic approach applicable generally to any problem which might arise. (HC)

VT 001 961 ED 026 455 Practical Electronics. Technical Instruction Manual.

Systems Operations Support, Inc., King of Prussia, Pa. Office of Education (DHEW), Washington, D.C. EDRS PRICE MF-\$1.00 HC-\$11.95

OEG-1-6-000242-0618

08

Pub Date - Sep66 237p.

\*TRADE AND INDUSTRIAL EDUCATION; \*PROGRAMED TEXTS; \*ELECTRONICS; \*ELECTRICAL OCCUPATIONS; HIGH SCHOOLS; SEQUENTIAL APPROACH; EQUIPMENT MAINTENANCE

This student instruction manual was developed as a part of "A Study of The Effectiveness of a Military-Type Computer-Based Instructional System When Used in Civilian High School Courses in Electronics and Auto Mechanics," available as ED 023 887 (VT 006 916, ARM Winter 1969). The material emphasizes a troubleshooting strategy for repair of equipment based upon a logical and systematic gathering of symptoms, analysis of these, knowledges of pyramidial structure of the equipment design, coupled with a strategy for isolation of the malfunction by levels from major subsystem to section to component, removal and replacement or direct repair of the component, and finally, an operational check to determine that the equipment is performing satisfactorily. The manual includes materials sufficient to train a person with aptitude but no previous electronics training to a level of an outside repairman, and is designed to encompass 12 to 16 weeks depending upon the ages, intelligence, and cultural background of the student. A portable television set is used as the vehicle for the instruction. Workbooks for students and course guides for the instructor are also available. (HC)

BR -5-1332

VT 002 100 Smith, Farmer S., Ed. The General Related Units for Industrial Cooperative Training; A Suggested Study of Topics Needed by Every Vocational Student, Teachers' Guide.

North Carolina State Univ., Raleigh. Dept. of Industrial Education North Carolina State Dept. of Public Instruction, Raleigh. Trade and Industrial Education MF AVAILABLE IN VT-ERIC SET. Pub Date - 1Aug65 185p.

\*TEACHING GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*VOCATIONAL ADJUSTMENT; GRADE 11; GRADE 12; \*COOPERATIVE EDUCATION; BIBLIOGRAPHIES

This guide is for teacher use in conducting the related instruction portion of trade and industrial cooperative education programs. Suggested methods, devices, references and an outline of the instructional content are provided. Major units are: (1) Orientation, (2) Employment, (3) How to Study, (4) Duties and Responsibilities of the Worker, (5) Agencies Affecting Employment, (6) Safety, First Aid, Health, and Hygiene, (7) Consumer Economics, (8) Character Development, Personality, and Human Relations, (9) Citizenship, (10) Communication Skills, (11) Government Services, and (12) Applied Mathematics and Science. Supplementary materials include an extensive bibliography of books, pamphlets, and 16 mm films. A related textbook for student use covering the same content is VT 000 804 (AIM Summer 1969). (EM)



VT 003 533 Technical Subjects, Courses of Study.

Ontario Dept. of Education, Canada. The Science, Technology, and Trades Branch MF AVAILABLE IN VT-ERIC SET.
Curriculum RP-27.
Pub Date - 67 274p.

\*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; SECONDARY GRADES ONTARIO; CANADA

This curriculum guide covers the technical, mathematics, and science courses for grades 11-12 of the Five-Year Programme, grades 9-12 of the Four-Year Programme, and grades 9-10 of the Two-Year Programme. These curriculums cover (1) Aircraft, (2) Air Conditioning and Refrigeration, (3) Applied Electricity, (4) Applied Electronics, (5) Auto Body Repair, (6) Auto Mechanics, (7) Drafting, (8) Graphic Arts, (9) Industrial Chemistry, (10) Industrial Physics, (11) Machine Shop, (12) Plumbing, (13) Sheet Metal, (14) Welding, and (15) Woodworking. Descriptive paragraphs are provided for the several topics covered for each course as well as general objectives. (EM)

VT 004 772
Lehman, Walter, And Others
Industrial-Service Engineering Technology, Automotive Major, Evaluation Monograph.

Marathon County Board of Vocational, Technical and Adult Education, Wausau, Wis.
Marathon County Technical Inst., Wausau, Wis.
MF AVAILABLE IN VT-ERIC SET.
North Central Technical Institute, P.O. Box 750, River Drive, Wausau, Wisconsin 54401 (\$5.00).
Pub Date - 68 160p.

\*PROGRAM GUIDES; \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); \*TECHNICAL EDUCATION; TECHNICAL INSTITUTES; PROGRAM DESCRIPTIONS; PROGRAM CONTENT; PROGRAM EVALUATION; COURSE ORGANIZATION
\*AUTOMOTIVE TECHNOLOGY: MARATHON COUNTY TECHNICAL INSTITUTE (WISCONSIN)

A curriculum guide for use by teachers in course planning for post-secondary auto mechanics courses is included in this evaluation report. It was developed by vocational teachers aided by an advisory committee. Topical course outlines are provided for the 20 courses which comprise the curriculum. Each outline also furnishes (1) title, (2) class and credit hours, (3) course description, (4) course objectives, and (5) texts and references. Supplementary materials include (1) Statement of Institutional Purposes and Curriculum Organization, (2) Descriptive Philosophy of the School, (3) textbook list, (4) description of the school library, (5) personnel resumes, and (6) minutes of an advisory committee meeting. The evaluative report also discusses facilities and equipment, administration, and instruction. (EM)

VT 005 617 Careers Related to Industrial Education.

Los Angeles City Schools, Calif. Evaluation and Research Section
MF AVAILABLE IN VT-ERIC SET.
Los Angeles City School Districts, Administrative Services Branch, 450 North Grand Avenue, P.O. Box 3307, Los Angeles, California 90054 (\$.75, single copies only).
Pub Date - 64 162p.

\*STUDY GUIDES; \*REFERENCE MATERIALS; \*TRADE AND INDUSTRIAL EDUCATION; \*OCCUPATIONAL GUIDANCE; \*OCCUPATIONAL INFORMATION; SECONDARY GRADES; CLASSROOM GUIDANCE PROGRAMS; CAREER OPPORTUNITIES

This collection of occupational information was prepared for secondary school industrial education teachers who advise students on occupations. Each of the 64 informational outlines provides (1) personal requirements, (2) educational opportunities in junior and senior high school, (3) educational opportunities beyond high school, (4) advancement and occupational outlook, and (5) related and specialist occupations. They are keyed to the "Dictionary of Occupational Titles." Sections of the guide are (1) Auto Mechanics, (2) Drafting, (3) Electronics, (4) Graphic Arts, (5) Industrial Crafts, (6) Metal, and (7) Woodwork. A bibliography cites 30 references. (EM)

VT 006 739 Engine-Electrical Tune-Up System. (Charts). Standards of Adjustment.

Automotive Electric Association, Detroit, Mich.
DOCUMENT NOT AVAILABLE FROM EDRS.
Automotive Electric Association, 16223 Meyers Road, Detroit, Michigan 48235 (\$5.50).
Pub Date - 68 150p.

\*REFERENCE MATERIALS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS; ENGINES; SPECIFICATIONS; REPAIR; MAINTENANCE; \*CHARTS

This set of reference charts is for student and auto mechanic use in the study of automotive tune-up, replacement, and testing of engine electrical and fuel components in advanced auto mechanics courses. It was developed from tune-up specifications obtained from manufacturers in order to provide specific standards of adjustment for the service of automotive engine electrical and fuel components. Adjustment standards are presented in chart form for 1968 automobiles manufactured by American Motors Corporation, Chrysler Corporation, Ford Motor Company, General Motors Corporation, and Kaiser Jeep Corporation. Separate charts provide additional photographic illustrations of carburetion adjustments for the Carter, Holley, Rochester, and Autolite carburetors. Charts are also given for adjustment of emission control systems. The material is not intended for use as a textbook. The students should have a basic knowledge of automotive tune-up procedures. A companion document, "A.E.A. Tune-Up System, 1968 Wiring Diagrams," is available as VT 006 740, in this issue. (HC)

VT 006 740 A.E.A. Tune-Up System; 1968 Wiring Diagrams. Supplement to the A.E.A. Tune-Up Specification Charts.

Automotive Electric Association, Detroit, Mich.
DOCUMENT NOT AVAILABLE FROM EDRS.
Automotive Electric Association, 16223 Meyers Road, Detroit, Michigan 48235 (\$5.50).
Pub Date - 68 480p.



\*REFERENCE MATERIALS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS; ELECTRIC CIRCUITS; MOTOR VEHICLES; ELECTRICAL SYSTEMS; \*CHARTS

This reference manual is for student and auto mechanic use in the study of automotive rewiring in advanced auto mechanics courses. It was developed from wiring diagrams obtained from manufacturers' service manuals. The objective of the material is to provide specific automotive wiring and circuitry diagrams to be used in automotive rewiring. Wiring diagrams are presented for 196B automobiles manufactured by American Motors Corporation, Chrysler Corporation, Ford Motor Company, General Motors Corporation, and Kaiser Jeep Corporation. The time required for assimilation is the time necessary to study individual diagrams, as the manual is not intended as a textbook. The students should have a basic knowledge of electricity and electrical symbols and experience-type familiarity with automotive wiring, circuitry, and connections. Separate manuals have been published annually since 1959. A companion document, "Engine-Electrical Tune-Up System (Charts) Standards of Adjustment," is available as VT 006 739, in this issue. (HC)

VT 007 390
Fundamentals of Electricity and Magnetism. Training Chart Manual. Section A.

Delco Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.35).
Pub Date - Jan67 36p.

\*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); \*ELECTRICITY; SECONDARY GRADES; ADULT VOCATIONAL EDUCATION; FUNDAMENTAL CONCEPTS; \*CHARTS

This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover fundamental principles of electricity and magnetism on which the rest of the series builds, including: (1) Composition of Matter, (2) What Is Electricity, (3) Ohm's Law and Circuits, (4) Properties of Conductors, (5) Magnetism, (6) Electromagnetism, and (7) Electromagnetic Induction. The manual is designed for use with 26" by 36" training charts which are available for \$5.50 from the same source. Others in the series are announced as VT 007 391-VT 007 400, all in this issue. (HC)

VT 007 391 Storage Batteries. Training Chart Manual. Section B.

Deico Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.35).
Pub Date - Nov67 30p.

\*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); \*ELECTRICAL SYSTEMS; SECONDARY GRADES; ADULT VOCATIONAL EDUCATION; \*CHARTS; \*ELECTRIC BATTERIES

This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover the theory of operation and servicing procedures applicable to auto batteries and energizers including: (1) Battery Components and Construction, (2) Chemical Action in Batteries, (3) The Battery and Charging Circuit, (4) Effects of Temperature on Battery Charging Voltage and Charging Rates, (5) Measurement and Significance of Specific Gravity, (6) Capacity Ratings, (7) Battery Installation, and (B) Factors Affecting Battery Life. The manual is designed for use with 26" by 36" training charts, which are available for \$7.50 from the same source. Others in the series are announced as VT 007 390-VT 007 400, all in this issue. (HC)

VT 007 392 Cranking Motors. Training Chart Manual. Section C.

Delco-Remy, Anderon, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.35).
Pub Date - Dec67 23p.

\*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); SECONDARY GRADES; \*ELECTRICAL SYSTEMS; ADULT VOCATIONAL EDUCATION; \*CHARTS \*CRANKING MOTORS

This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover the operating principles of automotive cranking motors including (1) Motor Principles, (2) Frame and Field Assembly, (3) Armature Assembly, (4) Motor Drives, (5) Magnetic Switches and Solenoids, (6) Basic Circuits, and (7) Types and Designs. The manual is designed for use with 26" by 36" training charts which are available for \$5.50 from the same source. Others in the series are announced as VT 007 390-VT 007 400, all in this issue. (HC)

VT 007 393
Ignition System. Training Chart Manual. Section D.

Deico Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Deico-Remy, Anderson, Indiana 46011 (\$.35).
Pub Date - Apr6B 22p.

\*ELECTRICAL SYSTEMS; FUNDAMENTAL CONCEPTS; \*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; ADULT VOCATIONAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); SECONDARY GRADES; \*CHARTS

This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover the operating principles and construction features of the automobile ignition system including Basic Operating Principles, Ignition Coils, Ignition Distributors, and Oscilloscope Patterns. The manual is designed for use with 26" by 36" training charts which are available for \$5.50 from the same source. Others in the series are announced as VT 007 390-VT 007 400, all in this issue. (HC)



215

AIM/WINTER 69

VT 007 394 Generators. Training Chart Manual. Section E.

Delco Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.35).
Pub Date - 17Sep58 37p.

\*ELECTRICAL SYSTEMS; \*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); SECONDARY GRADES; ADULT VOCATIONAL EDUCATION; \*CHARTS \*GENERATORS

This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover the operating principles of automobile generators including: (1) Shunt Generator Principles, (2) Power and Ratings of a Generator, (3) Armature Reaction, (4) What Is Polarity, (5) Special Generator Circuits, (6) Generator Testing, and (7) Generator Polarity. The manual is designed for use with 26" by 36" training charts which are available for \$7.50 from the same source. Others in the series are announced as VT 007 390-VT 007 400, all in this issue. (HC)

VT 007 395 Standard Duty Generator Regulator. Training Chart Manual. Section F.

Delco Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.35).
Pub Date - 2Jan62 33p.

\*ELECTRICAL SYSTEMS; \*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); SECONDARY GRADES; ADULT VOCATIONAL EDUCATION; \*CHARTS \*GENERATOR REGULATORS

This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover the operating principles and servicing procedures for automobile generator regulators including (1) cutout relays, (2) step-voltage control, (3) vibrating voltage regulator, (4) combined current-voltage regulator, (5) combined current-voltage generator regulator, (6) checking standard-duty systems, (7) checking charging circuit for excessive resistance, (8) regulator electrical checks, (9) cutout relay adjustment, (10) regulator air gap, and (11) regulator adjustment. The manual is designed for use with 26" by 36" training charts which are available for \$6.50 from the same source. Others in the series are announced as VT 007 390-VT 007 400, all in this issue. (HC)

VT 007 396 Heavy Duty Generator Regulators. Training Chart Manual. Section G.

Delco Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011.
Pub Date - 1Ju160 41p.

\*ELECTRICAL SYSTEMS; \*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); SECONDARY GRADES; ADULT VOCATIONAL EDUCATION; \*CHARTS \*GENERATOR REGULATORS

This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover operating principles and servicing procedures for heavy duty automotive generator regulators including: (1) circuits, (2) single unit relays, (3) relay adjustments, (4) regulator adjustments, (5) 4-unit regulators, (6) electrical checks, (7) circuit breaker relay adjustments, (8) actuating relay adjustments, and (9) carbon pile generator regulators. Others in the series are announced as VT 007 390-VT 007 400, all in this issue. (HC)

VT 007 397
Fundamentals of Semiconductors. Training Chart Manual. Section J.

Delco Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.35).
Pub Date - Oct65 17p.

\*TRANSISTORS; \*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); SECONDARY GRADES; ADULT VOCATIONAL EDUCATION; \*CHART \*DIODES

This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover fundamental principles of semiconductors and operating principles of diodes and transistors including:
(1) Diode Leakage Current, (2) Zener Diode, (3) Performance Curves, (4) Diode Testing, (5) Basic Circuits, (6) Types and Designs, (7) Symbols, and (8) Testing. The manual is designed for use with 26" by 36" training charts which are available for \$7.50 from the same source. Others in the series are announced as VT 007 390-VT 007 400, all in this issue. (HC)

VT 007 398 Fundamentals of Delcotron Generators. Training Chart Manual. Section K.

Delco Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.35).
Pub Date - May66 22p.

\*ELECRICAL SYSTEMS; \*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); SECONDARY GRADES; ADULT VOCATIONAL EDUCATION; \*CHARTS \*GENERATORS



This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover operating principles, types, and designs of automobile generators including: (1) Review of Electricity and Magnetism, (2) Operating Principles of Delcotron Generators, (3) Generator Types and Designs, and (4) Generator Tests. The manual is designed for use with 26" by 36" training charts which are available for \$10.00 from the same source. Others in the series are announced as VT 007 390-VT 007 400, all in this issue.

VT 007 399 Transistor Regulators. Training Chart Manual. Section L.

Delco Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.35).
Pub Date - Nov66 13p.

\*TRANSISTORS; \*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); ADULT VOCATIONAL EDUCATION; \*CHARTS; SECONDARY GRADES \*TRANSISTOR VOLTAGE REGULATORS

This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover operating principles of the automobile transistor voltage regulator including an explanation of resistors, capacitors, diodes and transistors and printed circuitry. The manual is designed for use with 26" by 36" training charts which are available for \$7.50 from the same source. Others in the series are announced as VT 007 390-VT 007 400, all in this issue. (HC)

VT 007 400
Double Contact Regulators. Training Chart Manual. Section R.

Delco Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.35).
Pub Date - Nov66 17p.

\*ELECTRICAL SYSTEMS; \*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); SECONDARY GRADES; ADULT VOCATIONAL EDUCATION; \*CHARTS \*DOUBLE CONTACT VOLTAGE REGULATORS

This training manual is for use by students and teachers in courses covering automotive electrical equipment. It is one of a series of manuals developed by technical writers for a manufacturer. Illustrations and text cover operating principles of automotive double contact voltage regulators including design features, voltage regulators circuitry, regulator operation, temperature compensation, field relays, indicator lamp circuits, and ammeter circuits. The manual is designed for use with 26" by 36" training charts which are available for \$7.50 from the same source. Others in the series are announced as VT 007 390-VT 007 399, all in this issue. (HC)

VT 007 984 Tear Gas Manual.

Chicago Police Dept., Ill. Training Div. MF AVAILABLE IN VT-ERIC SET. Pub Date - nd 28p.

\*TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*POLICE; ADULT VOCATIONAL EDUCATION; \*LAW ENFORCEMENT; EMERGENCY SQUAD PERSONNEL; ILLUSTRATIONS \*TEAR GAS EQUIPMENT

This text is for studer: use in police training courses. It was developed by the Training Division of the Chicago Police Department. The purpose is to present information on tear gas equipment and its tactical use. Major topics are (1) Communications, (2) Equipment, (3) Tear Gas Grenades, (4) Tear Gas Masks, (5) First Aid Treatment, (6) Tactical Uses of Tear Gas, and (7) Persons Barricaded in a Building. Illustrations include photographs and line drawings. (EM)

VT 008 136 McDonough, Frances S. Guide for Course of Study for Welder Combination.

Tennessee State Board of Vocational Education, Murfreesboro. Manpower Development Training Section MF AVAILABLE IN VT-ERIC SET. Vocational Curriculum Laboratory, Box 1114, Murfreesboro, Tennessee 37130 (\$2.00). Pub Date - Apr66 61p.

\*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*WELDERS; WELDING; ADULT VOCATIONAL EDUCATION \*MANPOWER DEVELOPMENT AND TRAINING ACT PROGRAMS; MDTA PROGRAMS

This curriculum guide is for use by teachers in welding courses for adults. It was developed by a group of vocational teachers and the author. Major units include: (1) Oxyacetylene Welding, (2) Grinding, (3) Electric Arc Welding, (4) TIG Welding, (5) MIG Welding, (6) Pipe Welding, (7) Cutting, (8) Blueprints, (9) Abbreviations and Symbols, and (10) Shop Requirements for Math. These units give objectives, suggested instruction methods, and time allotments. The content was designed for a 1,440-hour course including 360 hours of pre-vocational and remedial training. Teachers should be competent welders and the students should be adults who need retraining or upgrading. Supplementary materials include safety regulations, a reference list, and a glossary. (EM)

VT 008 192
McDonough, Frances S.
Guide for Course of Study for Woodworking Machine Operator (Entry).

Tennessee State Board for Vocational Education, Nashville. Div. of Vocational Technical Education MF AVAILABLE IN VT-ERIC SET. Manpower Development and Training Office, Tennessee State Dept. of Vocational-Technical Education, Room 205, Cordell Hull Building, Nashville, Tennessee (\$2.00). Pub Date - nd 61p.



CURRICULUM GUIDES; TRADE AND INDUSTRIAL EDUCATION; WOODWORKING; ADULT VOCATIONAL EDUCATION \*\*WOODWORKING MACHINE OPERATORS; MANPOWER DEVELOPMENT AND TRAINING ACT PROGRAMS

This curriculum guide is for teacher use in planning preparatory vocational courses for woodworking machine operators. It was written by an individual with assistance from vocational instructors. Emphasis of the contents is on occupational competency and quality workmanship. Major units are Woodworking Basics, Joinery, and Woodworking Machines. This Manpower Development and Training Act course was designed for 928 hours of instruction including 230 hours of basic remedial education. Supplementary materials include a reference list and a glossary. (EM)

VT 008 194 McDonough, Frances M. Guide for Course of Study for Electronic Mechanic (Any Ind.) (Entry).

Tennessee State Board for Vocational Education, Nashville. Div. of Vocational Technical Education
MF AVAILABLE IN VT-ERIC SET.
Manpower Development and Training Office, Tennessee State Department of Vocational-Technical Education, Room 205,
Cordell Hull Building, Nashville, Tennessee 37219 (\$1.50).
Pub Date - nd 43p.

CURRICULUM GUIDES: TRADE AND INDUSTRIAL EDUCATION: ADULT VOCATIONAL EDUCATION \*\*ELECTRONIC MECHANICS; MANPOWER DEVELOPMENT AND TRAINING ACT PROGRAMS

This curriculum guide is for teacher use in planning preparatory vocational courses for electronic mechanics. It was written by an individual with assistance from vocational instructors. Emphasis of the contents is on occupational competency. Major units are Fundamentals of Electricity, Electronics, Industrial Applications, and Shop Requirements for Mathematics. This Manpower Development and Training Act course was designed for 2,000 and Shop Requirements for Mathematics. This Manpower Development and Training Act course was designed for 2,000 hours of instruction including 500 hours of basic remedial education. Supplementary materials include a reference list and a glossary. (EM)

VT 008 287 Electrical Experiments. Part I: Electric Motor Control.

Connecticut State Dept. of Education, Hartford, Div. of Vocational Education MF AVAILABLE IN VT-ERIC SET.

VT-214-12-1 Curriculum Center, Bureau of Vocational-Technical Schools, State Department of Education, Room 336, State Office Building, Hartford, Connecticut O6115 (Single copies available). Pub Date - Sep65 52p.

\*STUDY GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICAL OCCUPATIONS; ELECTRONIC CONTROL; \*ELECTRIC MOTORS; \*ELECTRICITY; ELECTRICIANS; GRADE 12; LABORATORY EXPERIMENTS; STUDENT PROJECTS; ILLUSTRATIONS

Information sheets and job instruction sheets are provided in this study guide to direct 12th-grade school vocational electricity trade students in the study of electric motor control. This is Part I of a 3-part vocational electricity trade students in the study of electric motor control. This is Part I of a 3-part vocational electricity. It was developed by a statewide curriculum committee laboratory experiment program in vocational electricity. It was developed by a statewide curriculum committee and tested h vocational-technical schools. Information sheets provide the student with background information and tested h vocational-technical schools. Information sheets provide the student with background information and tested h vocational the nine experiments outlined on job sheets which give the job objective, a list of necessary to complete the nine experiments outlined on job sheets which give the job objective, a list of necessary to complete the nine experiments of the job, a step-by-step procedure, a list of questions to be answered by the materials, and explanation of the job, a step-by-step procedure, a list of questions to be answered by the experiment Full Voltage Starter, experiment, and a list of study references. Representative job titles are: (1) Magnetic Full Voltage Starter, experiment, and a list of study references. Representative job titles are: (1) Magnetic Full Voltage Starter, experiment, and a list of study references. Representative job titles are: (1) Magnetic Full Voltage Starter, experiment, and a list of study references. Representative job titles are: (1) Magnetic Full Voltage Starter, experiment, and a list of study references. Representative job titles are: (1) Magnetic Full Voltage Starter, experiment good titles are: (1) Magnetic Full Voltage Starter, experiment good titles are: (1) Magnetic Full Voltage Starter, experiment good titles are: (1) Magnetic Full Voltage Starter, experiment good titles are: (1) Magnetic Full Voltage Starter, experiment good titles are: (1) Magnetic Fu

VT 008 288 Electrical Experiments. Part II: A-C Across the Line Control.

Connecticut State Dept. of Education, Hartford, Div. of Vocational Education
MF AVAILABLE IN VT-ERIC SET.
VT-214-12-2
Curriculum Center, Bureau of Vocational-Technical School, State Department of Education, Room 336, State Office Building, Hartford, Connecticut O6115 (Single copies available).
Pub Date - Sep65 56p.

\*STUDY GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; LABORATORY EXPERIMENTS; \*ELECTRONIC CONTROL; \*ELECTRICITY; \*ELECTRICAL OCCUPATIONS; ILLUSTRATIONS; GRADE 12; STUDENT PROJECTS

Information sheets and Job instruction sheets are provided in this study guide to direct the 12th-grade high school vocational electricity trade student in the study of alternating current (AC) across-the-line control. This is Part II in a 3-part laboratory experiment program in vocational electricity. It was developed by a statewide curriculum committee and tested in vocational technical schools. Information sheets provide the student with background information where necessary to complete the 11 experiments outlined on Job sheets which give the Job objective, a list of necessary materials, an explanation of the Job, a step-by-step procedure, a list of questions to be answered by the experiment, and a list of study references. Representative procedure, a list of questions to be answered by the experiment, and a list of study references. Representative Job titles are: (1) Low Voltage Control Circuit, (2) Two Motor Sequence Control, (3) Reversing Magnetic Controllers, and (4) Three Phase Plugging with Lockout of Interaction. The material is to be used by the student under teacher supervision for approximately 300 hours. The teacher should be certified in vocational electricity and have at least 8 years of trade experience. Students should have completed a exploratory ninth grade program and have employment goals as licensed electricians. Other experiment manuals in this series are available as VT 008 287 and VT 008 289, both in this issue. (HC)

VT 008 289 Electrical Experiments. Part III: Basic Electronics.

Connecticut State Dept. of Education, Hartford. Div. of Vocational Education.
MF AVAILABLE IN VT-ERIC SET.
VT-214-12-3
Curriculum Center, Bureau of Vocational Technical Schools, State Department of Education, Room 336, State Office Building, Hartford, Connecticut O6115 (Single copies available).
Pub Date - Sep65 91p.



218

\*STUDY GUIDES; \*LABORATORY EXPERIMENTS; \*ELECTRONICS; \*ELECTRICITY; \*ELECTRICAL OCCUPATIONS; STUDENT PROJECTS; GRADE 12; ILLUSTRATIONS

Information sheets and job instruction sheets are provided in this study guide to direct the 12th grade high school vocational electricity trade student in the study of basic electronics. It was developed by a statewide curriculum committee and tested in vocational-technical schools. Information sheets provide the student with background information to complete the 18 experiments outlined on job sheets which give the job objectives, a list of necessary materials, an introductory information statement and an explanation of the job, step-by-step procedures, a list of questions to be answered by the experiment, and a list of study references. Representative job titles are: (1) Vacuum Tube-The Edison Effect, (2) Triode Characteristics, (3) Pentode Characteristic Curves, (4) Power Supplies, and (5) Amplifier Circuits. The material is to be used by the student under teacher supervision for approximately 300 hours. The teacher should be certified in vocational electricity and have at least 8 years of trade experience. Students should have completed the exploratory ninth grade program and have employment goals as licensed electricians. Other experiment manuals in this series are available as VT 008 287 and VT 008 288, both in this issue. (HC)

VT 008 290
Theory and Fundamental Process Units, Tool and Diemaking. Grade 11.

Connecticut State Dept. of Education, Hartford. Div. of Vocational Education MF AVAILABLE IN VT-ERIC SET.
Curriculum Center, Bureau of Vocational-Technical Schools, State Department of Educaton, Room 336, State Office Building, Hartford, Connecticut O6115 (Single copies available).
Pub Date - 66 104p.

\*TEACHING GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*TOOL AND DIE MAKERS; GRADE 11; ACHIEVEMENT TESTS; MACHINE TOOLS

This teaching guide is for instructor use in developing trade-related instruction for Grade 11 students in vocational machine shop prgrams concentrating in tool and die making. It was developed by a statewide curriculum committee through trade analysis and tested in vocational-technical schools. The 52 instructional units are grouped into eight instructional blocks titled: (1) Lathe General, (2) Shaper, (3) Milling, (4) Drill Press, (5) Bench Work, (6) Grinding, (7) Machine Sawing, and (8) Larging, Hardening, Tempering. Each instructional unit contains lists of teaching points, instructional aids, and test questions. The material is to be used by a certified vocational machine shop instructor with 8 years of trade and experience to develop 150 hours of trade-related instruction. The document is mimeographed. (HC)

VT 008 291

Shop Theory for Machine Trades. Metallurgy of Iron and Steel. Sessions 1-12.

Connecticut State Dept. of Education, Hartford. Div. of Voctional Education MF AVAILABLE IN VT-ERIC SET. VT-218-T-6

Curriculum Center, Bureau of Vocational-Technical Schools, State Department of Education, Room 336, State Office Building, Hartford, Connecticut O6115 (Single coples available).
Pub Date - nd 51p.

\*TEACHING GUIDES; \*STUDY GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*METALLURGY; MACHINE TOOL OPERATORS; \*METAL WORKING OCCUPATIONS; HIGH SCHOOLS; TESTS

This teaching-study guide is for use in directing the study of related technical information on the metallurgy of iron and steel in high school vocational machine trades programs. It was developed by statewide curriculum committee and tested in vocational-technical schools. Representative titles of the 12 lessons are: (1) Chemistry of Iron and Steel, (2) Methods of Manufacture, Shaping and Forming, (3) Various Heat Treatments, and (4) The Theory of Iron and Carbon Alloys. Each lesson provides the teacher and student with the lesson object, study references, methods, and assignments, a lesson outline, and study questions. A true and false test for lessons 1-6, a completion test for lessons 7-12, and a final unit test are included. The material is to be used by the teacher and student the 90 hour unit. The teacher should be a certified vocational instructor with 8 years of trade experience and the students should be enrolled in a vocational machine trades program. A bibliography of reference materials is appended. (EM)

VT 008 312

Curriculum Guide for Trades and Industries Tailoring Programs.

South Carolina State Dept. of Education, Columbia. Trade and Industrial Education Section Clemson Univ., S.C. Vocational Education Media Center
MF AVAILABLE IN VT-ERIC SET.
Pub Date - 68 24p.

\*CURRICULUM GUIDES; OCCUPATIONAL HOME ECONOMICS; \*TRADE AND INDUSTRIAL EDUCATION; NEEDLE TRADES; \*CLOTHING INSTRUCTION; SEAMSTRESSES; SECONDARY GRADES; CLOTHING \*TAILORING

Guidelines for teacher use when planning an instructional program to develop the basic skills, knowledge, and attitudes for entry into the tailoring trade as apprentices were developed by tailoring instructors who participated in a two-day conference. The tailoring course, to be offered in high schools and area vocational centers, should be scheduled for 3 hours daily, 5 days per week, 36 weeks per year, for 2 years or 1,080 hours for students in grades 10, 11, and 12. Course objectives, a job description, and job opportunities are included in the document. A course content outline lists the topics thought to be essential to a thorough tailoring program. Topics should be adapted to local needs and unique situations. They include Safety, Tools, Equipment and Supplies, Basic Hand Operations, Uses of Power Sewing Machines, Garment Construction Steps, and Drafting. Sections on Pants, Vests, Skirts, and Coat Making break down content into parts, projects, alterations, repairs, and practice construction. Suggested reference books are listed. (FP)

VT 008 319

Oklahoma Curriculum Guide for Driver and Traffic Safety Education.

Oklahoma Curriculum Improvement Commission, Oklahoma City. State Committee on Driver and Traffic Safety Educ. Oklahoma State Dept. of Education, Oklahoma City
MF AVAILABLE IN VT-ERIC SET.
Pub Date - 69 104p.

\*STATE CURRICULUM GUIDES; \*DRIVER EDUCATION; \*TEACHING GUIDES; SECONDARY GRADES



219

This curriculum guide is for use by driver education teachers. It was developed by a state committee of teachers, administrators, and teacher educators under an Elementary and Secondary Education Act, Title V grant. Course units are: (1) Crienting Students to the High School Driver Education Program, (2) Social and Economic Background of the Automobile, (3) Physical Characteristics of the Driver, (4) Construction and Operation of the Automobile, (5) The Driving Compartment, (6) Signs, Signals and Markings, (7) Observance and Enforcement of Motor Vehicle and Traffic Laws, (8) Rules of the Road, (9) Driver Variables and Accident Prevention, (10) Urban and Rural Driving with a Defensive Overture, (11) Maintenance and Care of the Automobile, (12) Accident Reporting and Records, (13) Driving on Freeways, (14) Driving Under Adverse Conditions, (15) Purchasing and Insuring Your Car, (16) Operator Licensing and Vehicle Registration, (17) Alcohol and Drugs, and (18) Essential First Aid Knowledge Recommended for Automobile Drivers. Sources of teaching aids and hints on student evaluation are included. (EM)

Teaching Aids for Electrical Experiments, Grade 11. Lesson Plan,

Connecticut State Dept. of Education, Hartford. Div. of Vocational Education MF AVAILABLE IN VT-ERIC SET.

Curriculum Center, Bureau of Vocational-Technical Schools, State Department of Education, Room 336, State Office Building, Hartford, Connecticut 06115 (Single copies available). Pub Date - nd 66p.

\*TEACHING GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICITY; \*ELECTRICIANS; GRADE 11; \*LESSON PLANS

Lesson plans are provided in this teaching guide to aid the vocational electricity teacher in directing classroom instruction and electrical experiments for 11th-grade vocational electricity students. It was developed by a statewide curriculum committee and tested in vocational-technical schools. The lesson plans give the lesson objective, a list of necessary materials, presentation ideas, laboratory experiments keyed to the Grade 11 Electrical Experiments Manual, and a student homework assignment. Representative subjects covered in the lesson plans are: (1) commercial application of electromagnets, (2) electromagnetic instruments, (3) commercial generators, (4) direct current (DC) motors, (5) factors affecting alternating current (AC) circuits, and (6) electron tubes. The material is to be used by the vocational electricity teacher in directing approximately 570 hours of student classroom and laboratory experiences. Students should have completed a grade 9 exploratory program and have employment goals as licensed electricians. (HC)

VT 008 402 Experiments for the Student Laboratory.

General Radio Co., West Concord, Mass. MF AVAILABLE IN VT-ERIC SET. General Radio Company, Baker Avenue, West Concord, Massachusetts 01781 (no charge). Pub Date - 68 41p.

\*LABORATORY EXPERIMENTS; \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRONICS; \*PHYSICS; \*TECHNICAL EDUCATION; ENGINEERS; ELECTRICITY; ELECTRONIC TECHNICIANS

This group of seven laboratory experiments is for teacher and student use in basic electronics courses in high schools, colleges, and technical institutions. Experiments covered are: (1) Semiconductor Minority-Carrier Lifetime Measurements, (2) The Motion of a Projectile, (3) Distribution of Random Noise Voltages, (4) Fourier Synthesis, (5) Measurement of Source Impedance with Slotted Line by Coupled Sliding Load Technique, (6) The Universal Impedance Bridge, and (7) Electronic Voltmeters. The document is illustrated with line drawings and photographs. (AW)

Guide Syllabuses of Training for Metallurgical and Chemical Technicians.

Iron and Steel Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Pub Date " Oct66 10p.

\*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*CHEMICAL TECHNICIANS; \*METALLURGICAL TECHNICIANS; \*TECHNICAL EDUCATION; INDUSTRIAL TRAINING

These syllabuses, issued as supplements to the Iron and Steel Industry Training Board's "Recommendations for the Training of Technicians and Technologists" (VT 008 857, in this issue) are intended for use by companies that are preparing training programs for metallurgical and chemical technicians. The outlines cover 12 months of general laboratory practice, metallographic techniques, and mechanical testing and two and one-half years of on-the-job experience and related training. Other related documents are VT 008 415, VT 008 838, and VT 008 841, all in this issue. (EM)

<u>VI 008 415</u> Recommendations for Craft Apprentice Training 1966.

Iron and Steel Industry Training Board, London (England) MF AVAILABLE IN VT-ERIC SET. May66 42p. Pub Date -

\*CURRICULUM GUIDES; \*STATE STANDARDS; \*TRADE AND INDUSTRIAL EDUCATION; METAL WORKING OCCUPATIONS; \*SKILLED OCCUPATIONS; ELECTRICIANS; ON THE JOB TRAINING; \*APPRENTICESHIPS; GROUP INSTRUCTION **ENGLAND** 

Standards for craft apprentice training are forwarded for development of skilled craftsmen in the mechanical standards for craft apprentice training are forwarded for development of skilled craftsmen in the mechanical and electrical engineering trades. Three classes of apprentices are covered: (1) mechanical engineering fitters, fitter-turners, turners, and skilled machinists, (2) electricians, and (3) roll turners. Brief topical outlines and recommended syllabus items are given for 6 to 9 months of basic training, 2 to 6 months of specialty training, 6 to 10 months of advanced specialty training, and on-the-job training. These apprenticeship training recommendations supercede those of May 1965. Other related documents are VT 008 414, VT 008 838, VT 008 841, and VT 008 857, all in this issue. (EM)

Byer, Joe Automechanics Related Math. Assignment Sheets.



220

AIM/WINTER 69

MF AVAILABLE IN VT-ERIC SET.
Vocational Instructional Materials Laboratory, School of Technology, Indiana State University, Terre Haute, Indiana 47809 (\$.20).
Pub Date - 69 27p.

\*WORKBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); \*PRACTICAL MATHEMATICS; STUDENT PROBLEMS; GRADE 11; GRADE 12

This workbook is for student and teacher use in auto mechanics courses. It was developed by an individual teacher for use in secondary level vocational programs. The 16 assignment sheets provide illustrative material and problems for these topics: (1) Displacement, (2) Brake Horsepower, (3) Horsepower and Torque, (4) Taxable Horsepower, (5) Superchargers, (6) Re-surfacing Blocks and Heads, (7) Determining Intake and Exhaust Sizes, (8) Determining Engine Revolution Per Minute, (9) Cear Ratios, (10) Final Gear Ratio, (11) Torque Requirements and Availability, (12) Braking Time, (13) Torque Tension Wrenches, (14) Determining Spark Lead, (15) Spark Advance, and (16) Applying Ohm's Law. (EM)

VT 008 527 ED 030 721
The "Project ABLE" General Woodworking Curriculum. (Interim Product).

American Institutes for Research, Pittsburgh, Pa. Office of Education (DHEW), Washington, D.C. EDRS PRICE MF-\$0.25 HC-\$2.45

OEC-5-85-019 BR-5-0009

08

Pub Date - nd 47p.

\*WOODWORKING; VOCATIONAL EDUCATION; \*GRADE 10; CURRICULUM DEVELOPMENT; \*COURSE OBJECTIVES; JOB SKILLS; CORE CURRICULUM; \*COURSE DESCRIPTIONS; BEHAVIORAL OBJECTIVES; LEARNING ACTIVITIES; OCCUPATIONAL INFORMATION \*PROJECT ABLE

A sample of student tasks and topic objectives which were developed for woodworking courses in Project ABLE are given. A larger collection of these were identified for grades 10, 11, and 12. Prior to this activity an analysis of selected occupations was made, and a frequency count of skills and knowledges was utilized to determine the necessary objectives relative to selected woodworking occupations. This basic course which has been developed covers one third of the occupational sample. Included are lists of course and topic objectives, 68 tasks for grade 10, and sample lessons. (EM)

VT 008 535 Barrick, Harry T. Precision Measurement.

Indiana Div. of Secondary Vocational Education, Terre Haute
Indiana State Univ., Terre Haute. Vocational Instructional Materials Lab.
MF AVAILABLE IN VT-ERIC SET.
Vocational Instructional Materials Laboratory, School of Technology, Indiana State University, Terre Haute, Indiana 47809 (\$1.00).
Pub Date - 67 109p.

\*STUDY GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*MACHINISTS; GRADE 11; GRADE 12; \*MEASUREMENT; \*MEASUREMENT TECHNIQUES

This study guide is for student use in vocational courses for machinists. It was develoed by the author and focuses on precision measurement exercises. Each lesson is keyed to the text, "Precision Measurement in the Metal Working Industry," (Syracuse University Press). Some of the 48 assignments are: (1) Line Measurement, (2) Micrometers and Verniers, (3) Dial Gages and Test Indicators, (4) Hardness Testing, (5) Precision Gage Blocks, (6) Angular Measurement, (7) Concentricity Checking, (8) Use of the Sine Bar, (9) Optical Instruments, and (10) Surface Roughness. Each assignment provides a reading assignment and study questions which often involve practice exercises. (EM)

VT 008 536 Vocational Automotive Mechanics. A Teacher's Outline for Use in Organization and Management of Instruction.

Mississippi State Dept. of Education, Jackson. Curriculum Lab. MF AVAILABLE IN VT-ERIC SET. Curriculum Laboratory, Box NU, State College, Mississippi 39762 (\$1.50). Pub Date - Apr69 104p.

\*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS (OCCUPATION); GRADE 11; GRADE 12

This curriculum guide is for use by teachers of vocational courses for auto mechanics. It was developed by a committe of secondary teachers and dited by the staff of a curriculum materials laboratory. Major units in the course outling are: (1) Engine Rebuilding, (2) Fuel System, (3) Electrical System, (4) Cooling System, (5) Power Train, (6) Suspension System, (7) Steering System, (8) Braking System, (9) Heating and Air Conditioning, and (10) Welding. Supplementary materials include sample instruction sheets. Teachers should have vocational certificates and students should be interested in auto mechanics as an occupation. (EM)

VT 008 553 Blueprint Reading for Metal Trades.

Metal Trades Advisory Committee, Bedford, Ind.
Indiana State Univ., Terre Haute, Instructional Materials Lab.
MF AVAILABLE IN VT-ERIC SET.
Vocational Instructional Materials Laboratory, School of Technology, Indiana State University, Terre Haute, Indiana 47809 (\$1.00).
Pub Date - nd 90p.

\*STUDY GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*METAL WORKING OCCUPATIONS; GRADE 11; GRADE 12; \*STUDENT PROJECTS; \*BLUEPRINTS; READING

This study guide is for teacher or student use in vocational courses for the metal trades. It was developed by an advisory committee. The three sets of assignment sheets are keyed to Olivo and Payne, "Basic Blueprint Reading and Sketching," "Advanced Blueprint Reading for Machine Trades," Vol. I and II, Delmar Publishers, and "Machinery's Handbook," by The Industrial Press. Each of the 80 sheets gives a reading assignment, study questions assignment, and space for answers. The same assignment sheets are available in loose leaf form. (EM)



VT 008 569 Training Recommendations. Operatives.

Carpet Industry Training Board, Wilmslow, Cheshire (England).
MF AVAILABLE IN VT-ERIC SET.
Pub Date - Aug68 64p.

\*PROGRAM GUIDES; \*APPRENTICESHIPS; \*TRADE AND INDUSTRIAL EDUCATION; FLOOR LAYERS; \*SEMISKILLED OCCUPATIONS; INDUSTRY; EDUCATIONAL PROGRAMS; \*FOREIGN COUNTRIES ENGLAND; CARPET INDUSTRY TRAINING BOARD

This program guide is designed to improve the training of operatives with a long-range goal of improving efficiency and profitability in the carpet industry. Included is a list of steps to follow for systematic training of operatives. The three enclosed booklets cover: (1) Staffing the Operative Training Function, (2) Assessing Operative Training Needs, and (3) General Operative Training Recommendations. (GR)

VT 008 570 Welding, Blueprint Reading for Welders.

Indiana State Dept. of Public Instruction, Indianapolis. Trade and Industrial Service indiana State Univ., Terre Haute MF AVAILABLE IN VT-ERIC SET. Vocational Instructional Materials Laboratory, School of Technology, Indiana State University, Terre Haute, Indiana 47809 (\$.30). Pub Date-- nd 27p.

\*STUDY GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*WELDERS; \*BLUEPRINTS; GRADE 11; GRADE 12

This study guide is for use by teachers and students in vocational welding courses. The focus of the guide is on blueprint reading and it is related to the text, Bennt and Siy, "Blueprint Reading for Weders," (Delmar, 1962). Each lesson in the guide gives a reading assignment, study question assignment, and new vocabulary words. (EM)

VT 008 577 Audio-Visual Aids Relating to the Graphic Arts.

Michigan Industrial Education Society, Inc., Detroit
MF AVAILABLE IN VT-ERIC SET.
Michigan Industrial Education Society, 14890 Penrod Avenue, Detroit, Michigan 48223 (\$1.00).
Pub Date - Apr68 61p.

\*ANNOTATED BIBLIOGRAPHIES; \*TRADE AND INDUSTRIAL EDUCATION; \*GRAPHIC ARTS; \*AUDIOVISUAL AIDS; \*RESOURCE MATERIALS; FILMS; SLIDES; INDUSTRIAL ARTS; PRINTING

This annotated listing of slides, filmstrips, and films is developed to provide the printing instructor with a list of available audio-visual aids for instructional purposes and related information. The 233 entries are grouped into 24 categories some of which are block cutting, duplicating processes, ink, lithography, plate making, safety, and type. Each entry provides the source of availability and rental information as of October, and a description of the type of item and its contents. (EM)

VT 008 610 Industrial Technical Mathematics II for Plumbers.

Plumbers Vocational School, Bloomington. Joint Apprenticeship Committee
Indiana State Dept. of Public Instruction. Indianapolis. Trade-Industrial-Technical Education Branch
MF AVAILABLE IN VT-ERIC SET.
Pub Date - nd 29p

\*TEACHING GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*PLUMBERS; \*PRACTICAL MATHEMATICS; \*APPRENTICESHIPS; ALGEBRA; TEXTBOOK ASSIGNMENTS; TESTS

Designed for instructor's use only, the purpose of this teaching guide is to aid in directing the apprentice plumber in the development of proficiency in solving everyday problems pertaining to the plumbing trade by acquiring and applying certain fundamentals of algebra. It was developed by supervisory personnel of the Bloomington, Indiana, High School Industrial and Vocational training program and the Plumbers Joint Apprenticeship Committee, in cooperation with the Trade-Industrial-Technical Education branch of the State Division of Vocational Education of Indiana. Student assignment sheets and objective achievement tests are included. (AW)

VT 008 611 Proposed Occupational Preparation Program in Metal Skills. Tentative Draft Revised.

California State Dept. of Education, Sacramento. Bureau of Industrial Education MF AVAILABLE IN VT-ERIC SET.
Pub Date 66 327p.

\*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; MACHINISTS; \*METAL WORKING OCCUPATIONS; ENTRY WORKERS; EMPLOYMENT QUALIFICATIONS; OCCUPATIONAL INFORMATION; SHEET METAL WORKERS; PLUMBERS; WELDERS; REFRIGERATION MECHANICS; JOB SKILLS; SECONDARY GRADES; AUTO BODY REPAIRMEN; SALES WORKERS

Developed by California high school and college teachers through a series of workshops, this program guide is intended to aid in preparing high school students for entry level employment in the metal trades. Introductory chapters include course objectives and organization and general information on getting and keeping a job. The chapters include course objectives and organization and general information on getting and keeping a job. The remainder of the manual is divided into nine complete course outlines for individual metal working occupations, remainder of the manual is divided into nine complete course outlines for individual metal working occupations, (1) Machinist, (2) Welder, (3) Sheet Metal Worker, (4) Plumber and Pipefitter, (5) Air Conditioning including: (1) Machinist, (6) Automobile and Metal Painter, (7) Ornamental Iron Worker, (8) Hydraulic and Refrigeration Mechanic, (6) Automobile and Metal Painter, (7) Ornamental Iron Worker, (8) Hydraulic and Refrigeration Mechanic, and (9) Hardware Sales Clerk. Each outline gives: (1) occupational description and qualifications, Mechanic, and (9) Hardware Sales Clerk. Each outline gives: (1) occupational description and qualifications, (2) suggestions for presentation of course material, (3) general operating instructions, (4) evaluation (2) suggestions for presentation of course material, (3) general operating instructions, (4) evaluation (2) suggestions for presentation of course material, (3) general operating instructions, (4) evaluation (2) suggestions for presentation of course material, (3) general operating instructions, (4) evaluation (2) suggestions for presentation of course material, (3) general operating instructions, (4) evaluation (2) suggestions for presentation of course material, (3) general operating instructions, (4) evaluation (2) suggestions for presentation of course material, (3) general operating instructions, (4) evaluation (5) and (6) selected references. Some also include drawings, photographs, and checkups, (5) evaluation (6) sele

VT 008 613 Seeburger, John Machine Trades: Grinding and Heat Treating.



Indiana State Dept. of Public Intruction, Indianapolis. Trade-Industrial-Technical Education Branch MF AVAILABLE IN VI-ERIC SET. nd 151p. Pub Date -

\*CURRICULUM GUIDES; \*TEACHING GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*MACHINISTS; MACHINE TOOL OPERATORS; \*INDIVIDUAL INSTRUCTION; RESOURCE MATERIALS

This course outline was developed and compiled by a high school machine snop instructor to aid shop teachers in presenting related technical information on grinding and heat treating to students of machine shop. It is particularly recommended for use with the individual instruction method. The content is divided into 23 chapters, each containing: (1) a teacher's analysis sheet designed to aid the teacher in correlating technical throughout with manipulative skills. knowledge with manipulative skills, and (2) a student assignment sheet listing the subject of the unit questions to be answered, and text and reference material. Some units also provide information sheets for specific projects assigned. Supplementary materials include drawings, photographs, and a bibliography. (AW)

VT 008 617 Recommendations for Training. Operatives.

Ceramics Glass and Mineral Products Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Publications Officer, Ceramics, Glass and Mineral Products, Industry Training Board, Bovis House, Northolt Road, Harrow, Middlesex, England. Pub Date nd 31p.

INDUSTRY; \*PROGRAM GUIDES; \*SEMISKILLED OCCUPATIONS; \*EDUCATIONAL PROGRAMS; \*TRADE AND INDUSTRIAL EDUCATION; \*FOREIGN COUNTRIES; ADULT VOCATIONAL EDUCATION; ON THE JOB TRAINING

This guide is designed to assist companies in planning training programs for their employees working at the operative level. The content headings are: Introduction, Preparing Training Schemes, and Implementing Training Schemes. Included in the appendix are: (1) a job description, (2) a job analysis, (3) a breakdown of knowledge and skill, (4) a method study breakdown, (5) a skills analysis, (6) a skill learning exercise, (7) a fault analysis, (8) a training program, (9) an induction course, (10) a training manual, and (11) a record card. (GR)

Metallurgical Technology. A Suggested 2-Year Post High School Curriculum. Technical Education Program Series No. 10.

Office of Education (DHEW), Washington, D.C. Occupations Section MF AVAILABLE IN VT-ERIC SET. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (FS5.281:81012, \$1.25).

Nov68 121p. \*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*METALLURGICAL TECHNICIANS; \*METALLURGY; TECHNICAL EDUCATION

Developed by technical education specialists, this curriculum guide is designed to aid school administrators Developed by technical education specialists, this curriculum guide is designed to aid school administrators and advisory committees in planning and developing new programs or evaluating old ones in metallurgical technology. The curriculum is set up as a 2-year, full-time, post high school program. The content provides an outline of each course, including: (1) class and laboratory hours required, (2) course description, (3) major divisions, (4) texts and references, and (5) visual aids. Recommended physical facilities and layout for teaching metallurgy are presented, including suggestions on laboratory location, construction and equipment, and estimated costs of the program. Suggested content of an effective technical library includes encyclopedic and reference index materials, technical journals, periodicals and trade magazines, reference books, and visual aids. Supplementary materials provided are a bibliography and a selected list of professional and technical societies and trade organizations in the field of metallurgy. (AW)

Suggested Physical Agility Program.

Pub Date -

California State Dept. of Education, Sacramento. Bureau of Industrial Education MF AVAILABLE IN VT-ERIC SET. California State Department of Education, 721 Capitol Mall, Sacramento, California 95814 (\$.50).
Pub Date - 56 20p.; Presented by Group V at Fire Training Officers Workshop (May 9-13, 1966).

TRADE AND INDUSTRIAL EDUCATION; \*FIRE FIGHTERS; \*PERSONNEL SELECTION; \*TESTING PROGRAMS; \*PHYSICAL FITTNESS CALIFORNIA

Materials developed during a fire training officers workshop for a physical agility examination program for fireman candidates include: (1) a sample letter to candidates, (2) proctors' information, (3) scoring procedures and table, (4) waiver of liability form, (5) applicant's individual rating card, (6) back testing program, and (7) descriptions of physical agility test events. (JK)

Bent, Edward W.; Nelson, Richard S. Uniform Fire Science Curriculum.

California State Dept. of Education, Sacramento. Bureau of Industrial Education MF AVAILABLE IN VT-ERIC SET. California State Department of Education, 721 Capitol Mall, Sacramento, California 95814 (no charge). Pub Date -

\*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*FIRE FIGHTERS; \*FIRE SCIENCE EDUCATION; ADULT VOCATIONAL EDUCATION; JUNIOR COLLEGES

This curriculum guide is designed for use in junior colleges for preparation of both entry level and upgrading fire fighters. Prepared under the joint direction of the California Supervisor of Fire Training and the Chief of the Bureau of Industrial Education, the program was field tested for one year, reviewed, and revised according to recommendations of the Fire Training Program of the Bureau and the California Junior College Association. The core courses cover 10 subject areas, including: (1) Introduction to Fire Protection, (2) Introduction to Fire Suppression, (3) Introduction to Fire Prevention, (4) Fire Fighting Tactics and Strategy, (5) Fire Protection Equipment and Systems, (6) Related Codes and Ordinances, (7) Fire Hydraulics, (8) Fire



223

Apparatus and Equipment, (9) Fire Company Organization and Procedure, and (10) Rescue Practices. Under each of these headings, brief descriptive information, objectives, and a topical outline of the course are given. Recommended electives, both directly and indirectly related, also are listed. (AW)

VT 008 526 Oxy-Acetylene Welding, Technical Information.

Indiana State Dept. of Public Instruction, Indanapolis. Trade and Industrial Service Indiana State Coll., Terre Haute. Instructional Materials Lab.
MF AVAILABLE IN VT-ERIC SET.
Vocational Instructional Materials Laboratory, School of Technology, Indiana State University, Terre Haute, Indiana 47809 (\$.40).
Pub Oate - nd 40p.

\*STUDY GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*STUDENT PROJECTS; \*WELDERS; \*WELDING \*OXYACETYLENE WELDING

Developed by a committee of teachers, this study guide is for student use in vocational welding courses. Made up of a collection of student assignment and job sheets, the guide is intended to aid students in learning the related technical information necessary for oxyacetylene welding. The program is readily adaptable to the occupational needs of the individual student, by assigning only those sheets applicable to a particular phase of welding, or it may be used in its entirety for a comprehensive welding course. Each assignment sheet presents the work to be done, the reference source, selected technical terms to be learned, and suggestions for safety. The course should be taught by a qualified trade instructor. (AW)

VT 008 633
Monitoring of On-Job Training of Craft Apprentices in Electricity Boards Concerned with Distribution.
Recommendation 11.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Apr68 18p.

\*APPRENTICESHIPS; \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICAL OCCUPATIONS; SKILLED OCCUPATIONS; SUPERVISORY METHODS; INSTRUCTOR COORDINATORS; CURRICULUM GUIDES; \*FOREIGN COUNTRIES; STUDENT EVALUATION; ADULT VOCATIONAL EDUCATION; \*PROGRAM GUIDES; ON THE JOB TRAINING FINGLAND

This guide is concerned with establishing a system for monitoring the on-job training of craft apprentices. It is one of 18 developed by the Electricity Supply Industry Training Board. The principle features are Introduction, Supervision and Administration, and Checking Progress of Craft Apprentices. Appended are a specimen program for the second year of training for craft apprentice electricians and specimen student evaluation report forms. (GR)

VT 008 648
Job Corps Training Standard for Painter. Job Corps Handbook, 440.56.

Office of Economic Opportunity, Washington, D.C. MF AVAILABLE IN VT-ERIC SET. Pub Date - Feb69 20p.

\*RATING SCALES; \*JOB SKILLS; EVALUATION CRITERIA; \*ACHIEVEMENT RATING; FEDERAL PROGRAMS; \*PAINTERS; \*TRADE AND INDUSTRIAL EDUCATION; PERFORMANCE CRITERIA; STANDAROS

JOB CORPS

Set forth in this Job Corps Training Standard are the minimum essential skills and knowledge required to make a Corpsman employable as a painter apprentice. Standards for occupational skills are given in outline form for the areas of (1) Safety, (2) Painting tools and equipment, (3) Preparation of Painted or unpainted exterior wood or composition surfaces, (4) preparation of painted or unpainted interior wood or composition surfaces, (5) preparation of metal surfaces, (6) reparation of masonry and conrete surfaces, (7) estimation, (8) preparation of paints and coating, (9) paint application, walls, ceilings, train and/or exterior, and (10) clean up operations. Educational and communication skill standards are given for (1) reading program, (2) mathematics program, (3) language and study skills, (4) handwriting, (5) driver education, (6) speaking and listening skills, (7) Job Corps Advanced General Education Program, (8) World of Work Program, and (9) Social Attitudinal achievement. Column A in the check list gives the tasks and/or knowledge within each area in which the corpsmember is to be trained. Column B indicates the level to which each corpsmember should be trained. Column C is provided for a record indicating the level to which the corpsmember was actually trained and columns A and E are provided to permit indicating by the corpsmember and instructor when a task is completed. (HC)

VT 008 724 Safety Handbook: A Guide for Trade and Industrial Education Programs.

South Carclina State Dept. of Education, Columbia. Trade and Industrial Education Section Clemson Univ., S.C. Dept. of Industrial Education Vocational Education Media Center, Clemson, S.C. MF AVAILABLE IN VT-ERIC SET. State Supervisor of Trade and Industrial Education, Rutledge Building, Office of Vocational Education, State Department of Education, Columbia, South Carolina 29201 (limit one per state supervisor of trade and indust. educ.). Pub Date - 68 78p.

\*TEACHING GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*SAFETY EQUCATION; \*SCHOOL SHOPS; HIGH SCHOOLS; SCHOOL SAFETY; \*ACCIDENT PREVENTION; TRANSPARENCIES; UNITS OF STUDY (SUBJECT FIELDS)

This teaching guide was prepared for use by teachers of trade and industrial education programs in conducting an effective program of safety instruction and contains the basic general information needed for teaching safety in all trade areas. It was developed by an individual author and reviewed by teacher educators and state supervisors. Section I provides information for the teacher under the headings of Safety Responsibilities, Shop and Labor Safety, First Aid, and Teacher Liability. Section II is a unit of instruction emphasizing general safety and is planned as a 40-minute presentation keyed to 34 transparencies which are included with the teaching guide in the form of transparency masters. Topics in Section II include Introductory Comments on Safety, The Preventable Accident, Categories of Safety Rules, and Specific Shop Rules. The materials are to be used by certified trade and industrial education teachers for course planning and lesson development. Appended are: (1) South Carolina Eye Protection Law, (2) suggested reference books, films, and filmstrips, and (3) The National Standard School Shop Safety Inspection Check List. (EM)



VT 008 731 Curriculum Guide for Trades and Industries Brick Masonry.

South Carolina State Dept. of Education, Columbia. Trade and Industrial Education Section Clemson Univ., S.C. Dept. of Industrial Education Vocational Education Media Center, Clemson, S.C. DOCUMENT NOT AVAILABLE FROM EDRS.

State Supervisor of Trade and Industrial Education, Rutledge Building, Office of Vocational Education, State Separtment of Education, Columbia, South Carolina 29201 (limit one per state supervisor of trade & ind. educ.). Pub Date — 68 182p.

CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; TRANSPARENCIES; INSTRUCTIONAL AIDS; STUDENT PROJECTS; SECONDARY GRADES; BIBLIOGRAPHIES; \*BRICK LAYERS \*MASONRY

This curriculum guide is for masonry instructor use in course planning and lesson development for brick masonry programs in high schools and area vocational schools. It was developed by a committee of instructors, supervisors, teacher educators, and industrial representatives and reviewed by materials specialists and industrial representatives. The purpose of the trade and industrial masonry program is to develop in the student the necessary manipulative skills, good work habits, and an understanding of basic fundamentals of masonry sufficient for him to enter the trade as an apprentice. In addition to general and specific program objectives the material provides the certified masonry instructor with an outline of course content, related information materials, and suggested reference books, charts, pamphlets, films, filmstrips, and publishers necessary to develop a 1,080-hour course of study. A set of 77 overhead transparency masters are included to supplement the curriculum guide and are keyed to the outline of course content. A set of 47 job instruction sheets is also included and keyed to corresponding transparencies masters. (HC)

VT 008 805 The Cranking Circuit (and How It Works).

General Motors Corp., Anderson, Ind. Delco-Remy Div.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.15).
Pub Date - nd 24p.

\*FILM STRIPS; \*ILLUSTRATIONS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS; \*ELECTRICAL SYSTEMS; RESOURCE MATERIALS; INDUSTRIAL ARTS; POWER MECHANICS \*CRANKING CIRCUIT

The 57-frame color film strip, "The Cranking Circuit," developed for use in automotive classroom and shop instruction is presented in this film-script booklet. The text for each frame is taken from 33 1/3 rpm records designed to accompany the film strip. The film booklet provides illustrations and discussion which describe the function of each part of the cranking circuit and shows how they work together to provide the convenience, the safety and the control which combine to form the modern automotive cranking circuit. The film booklet is one of a series which cover the operation and maintenance of the various units in the automotive electrical system. The 35 mm color film strip with 33 1/3 rpm records is available as No. 9025K for \$6.00 from the source of availability indicated for the document. (HC)

 $\underline{VT}$  008 806 Introducing the Delcotron Generator and the Charging Circuit.

General Motors Corp., Anderson, Ind. Delco-Remy Div.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.15).
Pub Date - Aug63 18p.

\*FILM STRIPS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS; \*ELECTRICAL SYSTEMS; \*ILLUSTRATIONS; RESOURCE MATERIALS; INDUSTRIAL ARTS; POWER MECHANICS \*AC GENERATORS

The 50-frame color filmstrip, "Delcotron Generator and the Charging Circuit," developed for use in automechanics classroom and shop instruction is presented in this film-script booklet. The text for each frame is taken from 33 1/3 rpm records designed to accompany the filmstrip. The purpose of the booklet is to present illustrations and discussion which describe construction, maintenance, and operating principles of the diode-rectified alternating current generator and the charging circuit in which it operates. The film booklet is one of a series which cover the operation and maintenance of the various units of the automotive electrical system. The 35 mm color filmstrip with 33 1/3 rpm records is available as No. 9011K for \$6.00 from the source of availability indicated for this document. (HC)

 $\frac{\text{VT 008 807}}{\text{Let's Talk Energizers}}$  and Batteries Testing and Servicing.

General Motors Corp., Anderson, Ind. Delco-Remy Div.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.15).
Pub Date - Sep6 29p.

\*FILM STRIPS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS; \*ELECTRIC BATTERIES; \*ILLUSTRATIONS; POWER MECHANICS; ELECTRICAL SUPPLIES; RESOURCE MATERIALS; INDUSTRIAL ARTS

The 98-frame color filmstrip, "Energizers and Batteries," developed for use in auto mechanics classroom and shop instruction is presented in this film-script booklet. The text for each frame illustration is taken from 33 1/3 rpm records designed to accompany the filmstrip. The purpose of the booklet is to present illustrations and discussion which describe energizer and battery construction, testing, and maintenance. The film booklet is one of a series which cover the operation and maintenance of the various units in the automotive electrical system. The 35 mm color filmstrip with 33 1/3 rpm records is available as No. 9022K for \$6.00 from the source of availability indicated for this document. (HC)

 $\frac{ ext{VT 008 808}}{ ext{Regulation}}$  and the Charging Circuit.

General Motors Corp., Anderson, Ind. Delco-Remy Div.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.15).
Pub Date - nd 19p.



225

\*FILM STRIPS; \*ILLUSTRATIONS; \*TRADE AND INDUSTRIAL EDUCATION; ELECTRICAL SYSTEMS; \*AUTO MECHANICS; RESOURCE MATERIALS; INDUSTRIAL ARTS; POWER MECHANICS; \*ELECTRONIC CONTROL

The 52-frame color film strip "Regulation and the Charging Circuit," developed for use in auto mechanics classroom and shop instruction, is presented in this film script booklet. The text for each frame illustration is taken from 33 1/3 rpm records designed to accompany the film strip. Illustrations and discussion are presented which describe the construction and operating principles of the battery, generator, and regulator. The film booklet is one of a series which cover the operation and maintenance of the various units in the automotive electrical system. The 35 mm color film strip with 33 1/3 rpm records is available as No. 9015K for \$6.00 from the source of availability indicated for the document. (HC)

VT 008 809 20,000 Volts under the Hood: The Ignition Circuit and How It Works.

General Motors Corp., Anderson, Ind. Delco-Remy Div.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.15).
Pub Date - nd 23p.

\*FILM STRIPS; \*ILLUSTRATIONS; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS; \*ELECTRICAL SYSTEMS; RESOURCE MATERIALS; INDUSTRIAL ARTS; POWER MECHANICS \*IGNITION CIRCUIT

The 63-frame color film strip "20,000 Volts under the Hood," developed for use in auto mechanics classroom and shop instruction is presented in this film script booklet. The text for each frame is taken from 33 1/3 rpm records designed to accompany the film strip. The purpose of the booklet is to provide illustrations and discussion which describe how the parts of the ignition circuit work together to produce the high-voltage spark necessary for high-compression engines. The film booklet is one of a series which cover the operation and maintenance of the various units in the automotive electrical system. The 35 mm color film strip with 33 1/3 rpm records is available as No. 9020K for \$6.00 from the source of availability indicated for this document. (HC)

VT 008 838
Planning and Supervision of Stage IV Training for Craft Apprentices--May 1968.

Iron and Steel Industry Training Board, London (England) MF AVAILABLE TO VT-ERIC SET.
Pub Date - May68 3p.

\*PROGRAM GUIDES; \*APPRENTICESHIPS; ON THE JOB TRAINING; METAL WORKING OCCUPATIONS; ADULT VOCATIONAL EDUCATION; \*TRADE AND INDUSTRIAL EDUCATION ENGLAND

Prepared by the Iron and Steel Industry Training Board, this booklet is a supplement to "Recommendations for Craft Apprentice Training, 1966" (VT 008 415, in this issue). The content relates to on-the-job training and includes recommendations on the following: (i) responsibility of engineers, foremen, and training staff for organizing, supervising, and assessing training, (2) rotational sequence required for apprentices, (3) engineering sections which should provide training, (4) time to be spent in each section, and (5) methods of evaluating progress of apprentices. The importance of safe working practices is also covered briefly. Other related documents are VT 008 414, VT 008 841, and VT 008 857, all in this issue. (AW)

VT 008 841
Recommendations for the Training of Boilermakers, Welder and Blacksmith Apprentices, 1967.

Iron and Steel Industry Training Board, London (England) MF AVAILABLE IN VT-ERIC SET.
Pub Date - May67 36p.

\*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*APPRENTICESHIPS; \*METAL WORKING OCCUPATIONS; WELDERS; PROGRAM DESCRIPTIONS; \*SKILLED OCCUPATIONS; ON THE JOB TRAINING BOILERMAKERS; BLACKSMITHS; ENGLAND

Prepared by the Iron and Steel Industry Training Board, this booklet is a supplement to "Recommendations for Craft Apprentice Training, 1966" (VT 008 415, in this issue), superceding the section on training for the trades of boilermakers, welders, and blacksmiths. A topical outline of the program covers 6 to 9 months general basic training, 12 months basic training in the specific trades, 6 months advanced specialized training, and 2 years on-the-job training. The guide includes suggestions for selection and recruitment of trainees, supervision, and evaluation. Other related documents are VT 008 414, VT 008 838, and VT 008 857, all in this issue. (AW)

 $rac{VT\ 008\ 857}{Recommendations}$  for the Training of Technicians and Technologists.

Iron and Steel Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Pub Date - May66 21p.

\*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*TECHNICAL EDUCATION; \*SUBPROFESSIONALS; \*TECHNICAL OCCUPATIONS; INDUSTRIAL TRAINING \*TECHNOLOGISTS; ENGLAND

This booklet, issued by the Iron and Steel Industry Training Board, contains recommendations for establishing standards for the training of technicians and technologists. Training outline syllabuses are presented briefly for the following technicians: (1) mechanical engineering, (2) electrical engineering, (3) instrument engineering, (4) drawing office, (5) chemical and metallurgical, (6) fuel, and (7) computer. Training recommendations for engineering technologists and chemical and metallurgical technologists are given. Technician programs cover approximately 4 years, including a basic training period, a period of specialized training, and a final stage of on-the-job training in the specialized field. The technologists' training programs are comprised of four stages, covering approximately 2 years. Definitions of the terms "technician" and "technologist," suggestions for recruitment and selection of trainees, and general information on the programs are included. Related documents are VT 008 414, VT 008 415, VT 008 838, and VT 008 841, all in this issue. (AW)

VT 008 870 Technology and the Schools. Working Paper No. 18.



AIM/WINTER 69

Schools Council, London (England)
DOCUMENT NOT AVAILABLE FROM EDRS.
Sales Section, British Information Service, 845 Third Avenue, New York, New York 10022.
Pub Date - Mar68 44p.

TECHNOLOGICAL ADVANCEMENT; \*CURRICULUM DEVELOPMENT; \*INSTRUCTIONAL MATERIALS; \*STUDENT PROJECTS; PILOT PROJECTS; FOREIGN COUNTRIES; SCIENCE PROJECTS; SCHOOL INDUSTRY RELATIONSHIP; PROGRAM IMPROVEMENT; SCIENCE COURSES; \*INDUSTRIAL TECHNOLOGY; \*INDUSTRIAL EDUCATION; MATHEMATICS MATERIALS; TECHNICAL EDUCATION \*PROJECT TECHNOLOGY; ENGLAND

Project Technology was designed to investigate how a sistance could be offered to schools desiring to reflect the increasing importance of technology in their curriculums. The primary objectives are to design and test teaching materials and to stimulate outside support for education. Technology is defined as the purposeful use of man's knowledge of materials, sources of energy, and natural phenomenon. The existing situation is discussed from two approaches: (1) the study of the theoretical, analytical, and purely factual aspects of technology, and (2) the development of an original, inventive, and open-minded attitude toward technology. The materials to be developed include: (1) films, (2) materials for overhead projection, (3) programs, (4) electronic, mechanical, and structural material, (5) written material in the form of booklets, loose-leaf folders, and project outline cards, and (6) an inter-school student project information service. A cooperative relationship with industry is an integral part of Project Technology. Examples of student projects are included. (CH)

VT 008 911 Bank Teller.

Stanislaus County Multi-Occupational Adult Training Project, Modesto, Calif.

MF AVAILABLE IN VT-ERIC SET.
Modesto Junior College, College Avenue, Modesto, California 95350.
Pub Date - nd 13p.

\*PROGRAM DESCRIPTIONS; \*PROGRAM GUIDES; \*ADULT VOCATIONAL EDUCATION; \*BANK TELLERS; \*BANKING; PROGRAM DEVELOPMENT; CLERICAL OCCUPATIONS; PROGRAM EVALUATION; VOCATIONAL FOLLOWUP STANISLAUS, COUNTY MULTI-OCCUPATIONAL ADULT RETRAINING PROJECT; MODESTO; CALIFORNIA

Designed to prepare adult trainees for employment as bank tellers, this program was developed by an advisory committee of representatives from banks, the Department of Employment, and the business training section of Modesto Junior College. The 10-week, 300-hour course covered the following subject areas: (1) development of basic skills including typing, bookkeeping, and business mathematics, (2) communications skills, both verbal and written, (3) personal Job responsibility, (4) banking procedures and general information, and (5) use of banking business machines. Knowledge and performance of duties, care and use of equipment, and establishing acceptable personal habits and attitudes were emphasized. The teacher had 13 years teaching experience, office experience in bookkeeping and secretarial work, and had completed a bank teller tutor series. The 17 students enrolled in the course were women ranging in age from 19 to 36, with an average age of 27 and an average education of 11.8 years. All had been either unemployed, working less than full time, or at a skill below their demonstrated abilities. Standards for admission to the course were established by the Department of Employment and the college. The General Aptitude Test Battery was used to establish aptitude of the trainees and final selection was made through a specific program of testing and counseling. There were no dropouts and a followup survey one month after compliction of the course found eight of the 17 trainees employed. (AW)

VT 008 915 Charging Ignition and Cranking Systems: Periodic Maintenance and Circuit Checks.

General Motors Corp., Anderson, Indiana. Delco-Remy Div.
DOCUMENT NOT AVAILABLE FROM EDRS.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (\$.25).
Pub Date - 64 48p.

\*STUDY GUIDES; \*AUTO MECHANICS; \*AUTO MECHANICS (OCCUPATION); \*ELECTRICAL SYSTEMS; ELECTRIC BATTERIES; ELECTRIC CIRCUITS; EQUIPMENT MAINTENANCE; \*TRADE AND INDUSTRIAL EDUCATION; UNITS OF STUDY (SUBJECT FIELDS)

Prepared by technical writers of the Delco-Remy Division of General Motors, this manual is for use by vocational education teachers and students in auto mechanics courses. Applicable for classroom or shop instruction, the booklet is concerned with servicing automotive electrical equipment and includes both the periodic maintenance requirements of each component of the electrical system and a basic troubleshooting approach to the three major electrical systems on a vehicle charging, ignition, and cranking. Unit headings are: (1) Troubleshooting Tools or Instruments, (2) The Battery, (3) The D.C. Charging System, (4) The A.C. Charging System, (5) The Ignition System, and (6) The Cranking System. Line drawings illustrate the manual. (AW)

 $\frac{\text{VT}}{\text{Benze}}$  Benze, Alexander An Introduction to the Art of Photoengraving.

New Jersey State Dept. of Education, Trenton. Div. of Vocational Education
MF AVAILABLE IN VT-ERIC SET.
Vocational-Technical Curriculum Laboratory, Rutgers University, 10 Seminary Place, New Brunswick, New
Jersey 08903 (\$2.00).
Pub Date - Sep69 181p.

\*TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*PHOTOENGRAVERS; HIGH SCHOOL STUDENTS

This text is intended to provide the high school student with an understanding of the basic principles and working tools of photoengraving processes as a background for the "do it" stage of learning. It was developed at the state level by the author and a committee of teachers. Units include: (1) General Information, (2) Types of Engraving, (3) Tools and Equipment, (4) Copy and Artwork, (5) The Process Camera, and (6) The Fundamentals of Photoengraving. An achievement test is included for each unit. A section on formulas and charts presents a weight and measures conversion table, a chemical hazard chart, and glossary of terms related to art and copy layout, as well as information on: (1) process films, (2) time and temperature development, (3) photographing of colored copy, (4) filters and filter factors, (5) developer solutions, (6) stop baths, (7) fixing baths, (8) tray and tank cleaning, (9) negative reduction, and (10) negative intensification. The document is abundantly illustrated. (JK)

VT 008 983 Arc Welding. Materials and Material Processes Series.



Materials and Mechanics Research Center (Army), Watertown, Mass. Qulity and Reliability Assurance Handbook Battelle Memorial Inst., Columbus, Ohio. Columbus Labs.
MF AVAILABLE IN VT-ERIC SET.
Pub Date - 1Jul68 358p.

\*TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; ADULT VOCATIONAL EDUCATION; \*TECHNICAL EDUCATION; \*WELDING; GLOSSARIES; BIBLIOGRAPHIES; SUBPROFESSIONALS; \*QUALITY CONTROL; INSPECTION; ILLUSTRATIONS

This technical reference document is for use by the Department of Defense engineering and inspection personnel in the general field of arc-welding technology. The document was developed under contract with the Department of the Army. The content objectives are to develop understandings of the (1) history and devlopment of welding, (2) of important theoretical aspects of welding including metallurgical effects and arc theory, (3) of various arc-welding processes, (4) of welding application criteria, and (5) of quality assurance. Units include: (1) Arc-Welding Theory, (2) Arc-Welding Power Supplies, (3) Shielded-Metal-Arc Welding, (4) Granular Flux Processes, (5) Other Welding Processes, and (6) Quality Assurance. A glossary of welding terms, a bibliography of pertinent references on welding, and 122 illustrations are included. (CH)

VT 009 022 A New Craft Is Born; An Apprenticeship Program for Chemical Process Operator.

Union Carbide Corporation, Texas City, Tex. MF AVAILABLE IN VT-ERIC SET. Pub Date - 1Jul68 3p.

\*PROGRAM DESCRIPTIONS; \*APPRENTICESHIPS; CHEMISTRY; INDUSTRIAL TRAINING; ON THE JOB TRAINING; ADULT VOCATIONAL EDUCATION; \*SCIENCE INSTRUCTION; \*TRADE AND INDUSTRIAL EDUCATION \*CHEMICAL PROCESS OPERATOR

The history, development and content of a recently developed apprenticeship program for chemical process operators is described in this bulletin. The 3-year program combines 324 hours of classroom instruction and 6,000 hours of on-the-job training. Classroom instruction includes mathematics, physics, chemistry, instrumentation, unit operation, flow-chart readings, concepts computers, raw materials and utilities, operating problems, cost of doing business, and preparation equipment for maintenance. Plant engineers, supervisors and veteran operators assisted in the development of the curriculum. On-the-job training must be in three of the following areas: materials handling, thermal cracking, steam generation, converter operation, power generation and distribution, reactor operation, water cooling and distribution, compressor operation, fractionation-distillation, or water treating. The training program is registered by the Federal Committee on Apprenticeship of the Department of Labor, (CH)

VT 009 176
Coordinated Vocational-Academic Education Metal Trades Program. (Basic Metalworking, Welding, Sheet Metal Fabricating, Ornamental Ironworking).

Texas Education Agency, Austin. Dept. of Vocational Education MF AVAILABLE IN VT-ERIC SET. Pub Date - Jan69 94p.

\*CURRICULUM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; OCCUPATIONAL CLUSTERS; \*CULTURALLY DISADVANTAGED; SPECIAL EDUCATION; \*METAL WORKING OCCUPATIONS; SECONDARY GRADES; \*SEMISKILLED OCCUPATIONS

Compiled by state supervisors of vocational education, this guide is for teacher use in planning and conducting coordinated vocational—academic programs for students with special learning problems. The primary objectives of this suggested outline for a metal trades training cluster are: to prepare culturally disadvantaged high school students for employment in jobs requiring semiskilled knowledge and training, and to provide these students with a curriculum which will enable them to reach their maximum potential. Introductory units present general information on the program, including suggested methods of teaching and evaluating student progress, and recommended supervised practice and learning experiences. A topical outline of the training program covers information and skills to be learned, suggestions for presenting the material, and sources of information for the trades of welding, sheet metal fabricating, and ornamental ironworking. Supplementary materials include a bibliography, list of films and filmstrips, equipment and tool list, including costs, a suggested shop floor plan, and a form for teacher evaluation of the program. (AW)

VT 009 284 Communications Via Offset Lithography.

Maine State Dept. of Education, Augusta. Bureau of Vocational Education
MF AVAILABLE IN VT-ERIC SET.
Industrial Arts Education, Maine State Department of Education, Education Building, Augusta, Maine 04330 (no charge).
Pub Date - nd 15p.

\*STATE CURRICULUM GUIDES; \*INDUSTRIAL EDUCATION; \*GRAPHIC ARTS; BIBLIOGRAPHIES; GRADE 12; BEHAVIORAL OBJECTIVES

This state curriculum guide is for teacher use in course planning for Grade 12 in industrial arts and vocational education programs. It was developed in a workshop by teachers to provide suggestions for local courses of study. Each of the four stated objectives are stated according to expected pupil behavioral changes. Activities are suggested to implement anticipated changes. Contents include a bibliography, tools and equipment, materials and supplies, lessons to be taught, related lessons, teaching aids or devices, and evaluation techniques. The recommended time allotment is 280 minutes per week for 36 weeks. (GR)

VT 009 289
Job Analysis, Man Power Allotment and Work Schedules: Custodial Training Course. Resource Manual.

Florida State Dept. of Education, Tallahassee
MF AVAILABLE IN VT-ERIC SET.
School Plant Management Section, State Department of Education, Tallahassee, Florida.
Pub Date - nd 152p.

\*RESOURCE GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*\*CUSTODIAN TRAINING; \*SCHOOL MAINTENANCE; STUDENT EVALUATION; ADULT VOCATIONAL EDUCATION; JOB ANALYSIS; JOB SKILLS; INSERVICE EDUCATION; OCCUPATIONAL INFORMATION; MANPOWER NEEDS; RETRAINING

Developed by the Florida State Department of Education as part of an occupational cluster for custodial training, this resource manual is designed for use in planning implant training or retraining courses for school



custodians. The introductory section notes responsibilities of the county superintendent and reasons for rapid turnover in custodial personnel, and stresses the need for establishing clearer job classifications, job titles, and salary levels for custodial positions of varying responsibility. Unit topics are: (1) Job Analysis, relating to job description and specification, (2) Manpower Allotment, which deals with methods for determining time required for custodial tasks, (3) Custodial Work Schedules, including format examples, and (4) Evaluation, which includes building inspection forms and various charts, forms, and check sheets for rating custodial personnel. The proposed program is suitable to the Southeastern United States, and should be taught by a subject matter specialist. (AW)

VT 009 330 McRobbie, J.M. Your Future as a Draftsman.

California State Polytechnic Coll., San Luis Obispo. Dept. of Industrial Technology
California State Dept. of Education, Sacramento
DOCUMENT NOT AVAILABLE FROM EDRS.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$9.95 for illustrated script and filmstrip).
Pub Date - 68 21p.

\*FILMSTRIPS; \*SCRIPTS; \*TRADE AND INDUSTRIAL EDUCATION; \*DRAFTSMEN; \*OCCUPATIONAL INFORMATION; DRAFTING; SECONDARY GRADES; POST SECONDARY GRADES

Teachers and students in high schools and junior colleges may use this illustrated script and accompanying 71-frame filmstrip in vocational classes. The development group included college faculty and high school teachers. Subject-matter specialists and teachers reviewed the 1- to 2-hour unit prior to its production. The content provides occupational information concerning: (1) what a draftsman does, (2) what drafting pays, (3) what the working conditions are, (4) preparations for the job, (5) opportunities for promotion, (6) job disadvantages, and (7) why draftsmen like their jobs. Students should be of average ability. Additional resource information is desirable when studying this topic. (DM)

VT 009 331 Smith, Nelson L., III Basic Electronic Components: Resistors.

California State Polytechnic Coll., San Luis Obispo. Dept. of Industrial Technology
California State Dept. of Education, Sacramento
DOCUMENT NOT AVAILABLE FROM EDRS.
Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401
(\$7.50 for illustrated script and filmstrip).
Pub Date = 66 15p.

\*FILMSTRIPS; \*SCRIPTS; \*INDUSTRIAL EDUCATION; \*TECHNICAL EDUCATION; \*ELECTRONICS; ELECTRONIC EQUIPMENT; SECONDARY GRADES; POST SECONDARY GRADES \*RESISTORS

This illustrated manual and companion 48-frame color filmstrip was developed for use by vocational teachers with students of average ability in high schools and junior colleges. The content was reviewed by teachers and subject-matter specialists after being developed by college faculty and high school teachers. This material, which was designed for use in one or two class periods, describes the types of resistors, how resistors are made, and what they do. Standard textbooks should be used to supplement the slide-film presentation. (DM)

VT 009 343 Gray, David A. Handbook of Coaxial Microwave Measurements.

General Radio Company, West Concord, Mass.
MF AVAILABLE IN VT-ERIC SET.
General Radio Company, West Concord, Massachusetts 01781 (\$2.00).
Pub Date - 68 163p.

\*\*TECHNICAL EDUCATION; \*\*ELECTRONICS; \*\*TRADE AND INDUSTRIAL EDUCATION; \*\*ELECTRONIC TECHNICIANS; ELECTRONIC EQUIPMENT; REFERENCE BOOKS; \*\*SUPPLEMENTARY TEXTBOOKS

This handbook has been written for students as an introduction to laboratory procedures, for technicians who are working with coaxial instruments and components, and for scientists and engineers from other fields who must make microwave measurements in the course of their research. The chapters are entitled: (1) Introduction to Coaxial Transmission Lines, (a) Traveling Waves, (b) Standing Waves, (2) The Smith Chart, (3) Two-Ports and Discontinuities, (4) Some Theoretical Background, and (5) Basic Measurement Methods and Procedures. The document is printed and illustrated with line drawings and photographs. Supplementary material includes a table of symbols and word index. (GR)

VT 009 344
Peterson, Arnold P.G.; Gross, Ervin, Jr. Handbook of Noise Measurement.

General Radio Company, West Concord, Mass.
MF AVAILABLE IN VT-ERIC SET.
General Radio Company, West Concord, Massachusetts 01781 (\$2.00).
Pub Date - 67 286p.

\*TECHNICAL EDUCATION: \*MEASUREMENT INSTRUMENTS: EQUIPMENT UTILIZATION; BIBLIOGRAPHIES: \*TRADE AND INDUSTRIAL EDUCATION: \*ELECTRONIC EQUIPMENT; \*SUPPLEMENTARY TEXTBOOKS \*NOISE MEASUREMENT

This handbook is designed to clarify the terminology and definitions used in noise measurement, describe measuring instruments and their use, aid the user in selecting proper measuring equipment, and show how measurements can be interpreted to solve typical problems. The chapters are entitled: (1) Introduction, (2) What Are Noise and Vibration, (3) What Noise and Vibration Does and How Much Is Acceptable, (4) Instrumentation For Noise and Vibration, (5) What Noise and Vibration Measurements Should Be Made, (6) Techniques, Precautions and Calibrations, (7) Noise and Vibration Control, and (8) Some Case Histories. Appendixes include tables, definitions of noise terms, references and standards, and a catalog section on measuring instruments and accessories. The document is illustrated with line drawings and photographs. (GR)



229

VT 009 345 Minor Maintenance: Custodial Training Course. A Resource Manual.

Florida State Dept. of Education, Tallahassee DOCUMENT NOT AVAILABLE FROM EDRS.
School Plant Management Section, Florida State Department of Education, Tallahassee, Florida. Pub Date - nd 198p.

\*RESOURCE GUIDES; \*(RADE AND INDUSTRIAL EDUCATION; \*CUSTODIAN TRAINING; \*SCHOOL MAINTENANCE; \*INPLANT PROGRAMS; ADULT VOCATIONAL EDUCATION; RETRAINING; JOB SKILLS; RESOURCE MATERIALS

Designed as part of an occupational cluster for custodial training in the Southeastern United States, this resource manual is for use in planning in-plant training or retraining courses for school custodians. This material is concerned with minor maintenance, or the branch of custodial training relating to school maintenance requiring immediate attention, such as broken windows or making minor furniture repairs, but not requiring the services of a specialist in a particular field or major construction. The content includes units on: (1) Electrical, (2) Carpentry, (3) Plumbing, (4) Painting, and (5) Masonry, as well as a section on "Miscellaneous Information and Helpful Hints," such as troubleshooting on fluorescent lamps. Each unit contains definitions, procedures, and tools and equipment necessary for the various tasks covered. The material should be taught by subject matter specialists. (AW)

VT 009 362 On Management Training and Development. Recommendation 16.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Dec68 21p.

\*PROGRAM GUIDES; \*MANAGERIAL OCCUPATIONS; ADMINISTRATIVE PERSONNEL; EDUCATIONAL PROGRAMS; ON THE JOB TRAINING; \*MANAGEMENT EDUCATION; ELECTRICAL OCCUPATIONS; \*TRADE AND INDUSTRIAL EDUCATION; MANAGEMENT DEVELOPMENT; \*FOREIGN COUNTRIES ENGLAND; FLECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This program guide was developed as one of a group of 18. It was designed to provide information on management training and development for the improvement of performance of present managers and the development of younger staff members. Sections are: (1) Introduction, (2) Scope, (3) Features of Management Training and Development Schemes, (4) Responsibility for Management Training and Development, (5) Assessment of Managerial Manpower Requirements, (6) Job Requirements, (7) Recruitment, (8) Selection for Training, (9) Appraisal, (10) Programs of Training and Development, (11) Initial Stage of Development, (12) Training Aspects, (13) Transition to Management Stage, (14) Training Aspects, (15) Educational Aspects, (16) Further Development, (17) Senior Management, (18) Training Aspects, (19) Educational Aspects, (20) Evaluation and Feedback, and (21) Review of Management Training Schemes. (GR)

VT 009 366 The Training of Mates as Linesmen (Steel Tower Lines). Recommendation 15.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Oct68 19p.

\*APPRENTICESHIPS; \*TRADE AND INDUSTRIAL EDUCATION; EDUCATIONAL PROGRAMS; \*PROGRAM GUIDES; \*ELECTRICAL OCCUPATIONS: \*FOREIGN COUNTRIES ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This guide was developed as one of a group of 18 to recommend training programs in electrical occupations. It is designed to provide a uniform training procedure for the training of mates as linesmen (steel tower lines). Sections are: (1) Introduction, (2) Aims, (3) Source of Men for Training, (4) Pattern and Content of Training, (5) Practical Program, (6) Associated Theory and Related Knowledge, and (7) Monitoring of Training. Appendixes contain the descriptions of two formal courses with associated theory and related knowledge content and descriptions of two on-job training courses. (GR)

VT 009 367
Monitoring of On-Job Training of Craft Apprentices in Electricity Boards Concerned with Generation. Recommendation 14.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Sep68 9p.

\*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICAL OCCUPATIONS; \*PROGRAM GUIDES; \*FOREIGN COUNTRIES; EDUCATIONAL PROGRAMS; SKILLED OCCUPATIONS; ÉLECTRICITY; \*APPRENTICESHIPS; ON THE JOB TRAINING ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This guide was developed as one of a group of 18 recommendations. It is concerned with the monitoring of on-job training of craft apprentices. Major features include: Introduction, Supervision and Administration During On-Job Training, and Checking Progress of Craft Apprentices. (GR)

VT 009 368
The Training of Operatives in Electricity Boards Concerned with Distribution. Recommendation 13.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Sep68 22p.

\*PROGRAM GUIDES; \*APPRENTICESHIPS; ELECTRICITY; \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICAL OCCUPATIONS; EDUCATIONAL PROGRAMS; \*FOREIGN COUNTRIES; SEMISKILLED OCCUPATIONS; ON THE JOB TRAINING ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This guide was designed as one of a group of 18. Concerned with the training of operatives, major features are:(1) Occupational Description, (2) Objectives, (3) Recruitment, (4) Pattern of Training, (5) Induction and Introductory Training, (6) Specialized Training, (7) Associated Theory and Related Knowledge, and (8) Monitoring of Training. The training courses outlined within the appendixes are: (1) Introductory Course,



AIM/WINTER 69

(2) Training for Meter Readers, (3) Training for Storekeepers, (4) Training for Public Lighting Attendants, and (5) Training for Meter Fixers. The training programs are designed to combine formal instruction and on-job training. Suggested time allotments are included. (GR)

The Training of Training Officers. Recommendation 12.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Sep68 32p.

INSTRUCTIONAL STAFF; ADMINISTRATIVE PERSONNEL; \*FOREIGN COUNTRIES; OCCUPATIONAL INFORMATION; \*TRADE AND INDUSTRIAL TEACHERS; JOB SKILLS; \*TEACHER EDUCATION; \*ELECTRICAL OCCUPATIONS; \*PROGRAM GUIDES ENGLAND

This guide is concerned with the education of training officers. It was developed as one of a group of 18 to recommend vocational education programs in electrical occupations. The major features are: (1) Introduction, (2) The Training Functions in the Electricity Supply Industry, (3) Identifying Training Needs and Priorities, (4) Formulating Training Plans, (5) The Implementation and Administration of Training, (6) Evaluation of Training, (7) The Work of Training Officers in the Electricity Supply Industry, (8) Basic Skills and Knowledge, (9) Training Content, (10) General Subjects, (11) Training Subjects, (12) Recruitment and Selection, (13) Training of Training Officers, (14) Selection of External Courses, and (15) Career Development. Typical Job descriptions of (1) An Education and Training Officer, (2) Area Training Officers and Assistant Training Officers Headquarters (General), (3) An Assistant Training Officer Headquarters (Specialist), (4) A Training Center Supervisor, and (5) A Training Engineer (CEGB) in the electricity supply industry are included within the appendixes. (GR)

VT 009 370 On Industrial Staff Traineeships. Recommendation 9.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Apr69 14p,

\*PROGRAM GUIDES; \*STAFF IMPROVEMENT; \*TRADE AND INDUSTRIAL EDUCATION; ADULT VOCATIONAL EDUCATION; TECHNICAL EDUCATION; EDUCATIONAL PROGRAMS; ELECTRICAL OCCUPATIONS; \*INSERVICE EDUCATION; ENGINEERING; \*FOREIGN COUNTRIES ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This guide was developed as one of a group of 18 to provide training recommendations for electrical occupations. Principal features are: (1) Objectives, (2) Entry Standards, (3) Practical Training, (4) Supervision and Progress, and (5) Duration. Training program outlines for generation engineers, transmission engineers, and distribution engineers have been included along with a time schedule for each major topic of discussion. (GR)

VT 009 371 The Training of Jointers as Jointers (Extra High Tension). Recommendation 8.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Apr68 13p.

ADULT VOCATIONAL EDUCATION; \*FOREIGN COUNTRIES; \*APPRENTICESHIPS; \*ELECTRICAL OCCUPATIONS; \*TRADE AND INDUSTRIAL EDUCATION; ON THE JOB TRAINING; EDUCATIONAL PROGRAMS; \*PROGRAM GUIDES ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This guide was developed as one of a group of 18. Topics included are: (1) Aims, (2) Source of Men for Training, (3) Pattern and Content of Training, (4) Practical Programme, (5) Associated Theory, and (6) Monitoring of Training. The descriptions for two courses of formal instruction, including the associated theory, and two periods of on-job training are outlined. (GR)

VT 009 372
The Training of Mates as Jointers. Recommendation 7.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Apr68 18p.

\*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICAL OCCUPATIONS; \*APPRENTICESHIPS; SKILLED OCCUPATIONS; PROGRAM DESIGN; ON THE JOB TRAINING; \*PROGRAM GUIDES; CURRICULUM GUIDES; \*FOREIGN COUNTRIES; ADULT VOCATIONAL EDUCATION ENGLAND

This guide is concerned with the training of mates as jointers. It is one of 18 developed by the Electricity Supply Industry Training Board. The major units include: (1) Introduction, (2) Aims, (3) Source of Men for Training, (4) Practical Programme, (5) Associated Theory, (6) Monitoring of Training, and (7) Further Training to Jointer. Two formal course outlines, plus associated theoretical concepts and an on-job training course outline are described within the appendix. (GR)

VT 009 373
The Training of Mates as Linesmen (Wood-Pole). Recommendation 6.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Apr68 15p.

\*APPRENTICESHIPS; \*PROGRAM GUIDES; ON THE JOB TRAINING; EDUCATIONAL PROGRAMS; ADULT VOCATIONAL EDUCATION; \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICAL OCCUPATIONS; \*FOREIGN COUNTRIES ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This guide was developed as one of a group of 18 concerned with the training of personnel for electrical occupations. It contains information under headings of: (1) Introduction, (2) Aims, (3) Source of Men for



Training, (4) Pattern and Content of Training, (5) Practical Programme, (6) Associated Theory, (7) Monitoring of Training, and (8) Further Training. Included within the appendixes are two proposed programs, one for formal training which includes the study of associated theory integrated with practical work, and a second for on-job training of mates as linemen. (GR)

The Training of Craft Apprentices. Recommendation 1.

Electricity Supply Industry Training Board, London (England). MF AVAILABLE IN VT-ERIC SET. Electricity Supply Industry Training Board, 30 Millbank, Lenden, S.W. 1, England. Pub Date - Dec67 12p.

MAPPRENTICESHIPS; \*ELECTRICAL OCCUPATIONS; \*TRADE AND INDUSTRIAL EDUCATION; \*SKILLED OCCUPATIONS; PROGRAM GUIDES; \*FOREIGN COUNTRIES; EDUCATIONAL PROGRAMS ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This guide outlines a program for the education and training of craft apprentices in electricity supply. The principal features are: (1) Aims, (2) Pecruitment, (3) Indentures, (4) Education, (5) Training, (6) Tests and Appraisals, and (7) Duration. (GR)

The Training of Instructors. Recommendation ?.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET. Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England. Pub Date - Jun68 23p.

WORKSHOPS; \*PROGRAM GUIDES; \*FOREIGN COUNTRIES; \*TEACHER EDUCATION; \*TRADE AND INDUSTRIAL TEACHERS; \*TRADE AND INDUSTRIAL TEAC

This curriculum guide was developed as one of a group of 18 designed to provide a uniform procedure for the training of instructors in practical training workshops. Guide content includes: (1) Instructors and Their Work, (2) Instructor Standards and Sources of Recruitment, (3) Senior Instructor, (4) Selection, (5) Induction, (6) Training, (7) Programs for Instructors, (8) Syllabus of the Industry's Course, (9) Study Topics, (10) Programme for Senior Instructors, and (11) Administration and Staffing of Courses. The three levels and specific duties of instructors are defined. (GR)

Craft Apprentice Training Programmes for Electricians, Electrical Fitters, and Meter Mechanicians in Electricity Boards Concerned with Distribution.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET. Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England. Pub Date - Sep68 40p.

\*PROGRAM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICAL OCCUPATIONS; EDUCATIONAL PROGRAMS; \*FOREIGN COUNTRIES; \*APPRENTICESHIPS ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This program guide contains recommendations for training craft apprentices in electricity boards responsible for electrical distribution. It covers the following trades: electricians, electrical fitters, and meter mechanicians. The programs comprise three parts: formal training, on-job training, and an educational course. The formal training consists of instruction in the use of tools, measuring devices and materials commonly employed in crafts in the electricity supply industry and simulated training. Programs of training have been designed separately for each trade. Training for work in related trades is covered. Provision is made in all programs for instruction in first aid, accident prevention, and safe working methods. A glossary of education and training terms used in all programs is appended. (GR) and training terms used in all programs is appended. (GR)

Craft Apprentice Training Programmes for Mechanical Fitters, Electrical Fitters, and Instrument Mechanics in Electricity Boards Concerned with Generation.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET. Electricity Supply Industry Training Board, 30 Millbank, Lendon, S.W. 1, England. Pub Date - Jul69 63p.

\*PROGRAM GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICAL OCCUPATIONS; ELECTRICITY; SKILLED OCCUPATIONS; EDUCATIONAL PROGRAMS; \*FOREIGN COUNTRIES; \*APPRENTICESHIPS; ON THE JOB TRAINING ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD; ENGLAND; MECHANICAL FITTERS; ELECTRICAL FITTERS; INSTRUMENT MECHANICS

This curriculum guide was developed as one of a group of 18. It is designed to outline programs relevant to the training of craft apprentices in electricity boards concerned with generation and covers the following trades: mechanical fitters, electrical fitters, and instrument mechanics. The programs comprise three parts: trades: mechaning, on-job training, and an educational course. The formal training consists of instruction in the use of tools, measuring devices and materials commonly employed in crafts in the electricity supply the use of tools, measuring devices and materials commonly employed in crafts in the electricity supply industry, and simulated training. Training programs are outlined for each trade. Work in related trades is covered. Provision is made in all programs for instruction in first aid, accident prevention, and safe working methods. A glossary of education and training terms used in all programs is included. (GR)

The Training of Jointers and Linesmen's Mates in Electricity Boards Concerned with Distribution. Recommendation

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET. Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England, Pub Date - Nov68 13p.



AIM/WINTER 69

\*APPRENTICESHIPS: \*TRADE AND INDUSTRIAL EDUCATION; EDUCATIONAL PROGRAMS; \*ELECTRICAL OCCUPATIONS; \*PROGRAM GUIDES; \*FOREIGN COUNTRIES; ON THE JOB TRAINING ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This curriculum guide was developed as one of a group of 18 which were designed to provide information on the training of jointers and linesmen's mates in electricity boards concerned with distribution. The recommendations cover: (1) Occupational Description, (2) Objectives, (3) Recruitment, (4) Pattern of Training, (5) Induction and Introductory Training, (6) Associated Theory and Related Knowledge, (7) Monitoring of Training, and (8) Further Training. An introductory and two formal training course descriptions are appended. (GR)

VT 009 379
The Training of Student Engineering Apprentices. Recommendation 5.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Apr68 22p.

\*APPRENTICESHIPS; \*TECHNICAL EDUCATION; \*ELECTRICAL OCCUPATIONS; \*ENGINEERING; EDUCATIONAL PROGRAMS; \*FOREIGN COUNTRIES ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD; ENGLAND

This guide was developed as one of a group of 18 concerned with the training of personnel for electrical occupations. The principal features of this guide are: (1) Aims, (2) Entry Qualifications, (3) Training, (4) Technical Education, (5) Apprenticeship, and (6) Supervision. A training program description for generation engineers, transmission engineers, and distribution engineers is included for each of the following categories: student engineering apprentices following full-time academic courses of "thick" sandwich pattern, student engineering apprentices following "thin" sandwich courses, and student engineering apprentices following part-time or block-release courses. (GR)

VT 009 380 The Training of Supervisors. Recommendation 10.

Electricity Supply Industry Training Board, London (England)
MF AVAILABLE IN VT-ERIC SET.
Electricity Supply Industry Training Board, 30 Millbank, London, S.W. 1, England.
Pub Date - Apr68 11p.

\*\*PROGRAM GUIDES; EDUCATIONAL PROGRAMS; ADULT VOCATIONAL EDUCATION; \*\*TRADE AND IN \*\*USTRIAL EDUCATION; \*\*FOREIGN COUNTRIES; \*\*SUPERVISORS; \*\*SUPERVISORY TRAINING ENGLAND; ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD

This guide is concerned with the training of supervisors. It was developed as one of a group of 18 to recommend training programs for electrical occupations. Included are such major topics as: (1) Objectives, (2) Assessment of Training Needs, (3) Planning the Training Programme, (3) Formal Programmes Within the Industry, (5) Local Training, (6) External Courses, (7) Evaluation, (8) Administration of Training, and (9) Career Development. (GR)

VT 009 413 Design and Control of Concrete Mixtures.

Portland Cement Association, Skokie, III.
MF AVAILABLE IN VT-ERIC SET.
Portland Cement Association, Suite 409, 601 Rockwell Avenue, Cleveland, Ohio 44114.
Pub Date - Jul68 119p.

RESOURCE MATERIALS; \*SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; TECHNICAL EDUCATION; \*CEMENT INDUSTRY; BUILDING TRADES; \*CONSTRUCTION INDUSTRY; \*BUILDING MATERIALS; ARCHITECTS; ENGINEERS READY MIX CONCRETE

Developed and revised by the Portland Cement Association and tested by some 300 engineers, this booklet is designed to supply the most current information available on design and control of concrete mixtures to all users of concrete. Recommended as resource material for architects, engineers, and contractors in writing specifications for "ready-mix" concrete producers, the contents include chapters on: (1) Fundamental Facts About Concrete, (2) Portland Cements, (3) Mixing Water for Concrete, (4) Aggregates for Concrete, (5) Air-Entrained Concrete, (6) Admixtures for Concrete, (7) Proportioning Concrete Mixtures, (8) Hot-Weather Concreting, (11) Cold-Weather Concreting, (12) Volume Changes of Concrete, (13) Structural Lightweight Concrete, (14) Control Tests for Quality Concrete, (15) Special Types of Concrete, and (16) Suggested Specifications for Plain and Reinforced Concrete. Supplementary materials include a weights and measures conversion table and selected references listed for each chapter. (AW)

VT 009 415 Concrete Technology: Instructor's Guide.

Portland Cement Association, Chicago, III.
National Ready Mixed Concrete Association, Silver Spring, Md.
MF AVAILABLE IN VT-ERIC SET.
Portland Cement Association, 6D1 Rockwell Avenue, Cleveland, Ohio 44114 (\$1.13).
Pub Date - 65 260p.

\*TEACHING GUIDES; \*CURRICULUM GUIDES; SUPPLEMENTARY TEXTBOOKS; \*TRADE AND INDUSTRIAL EDUCATION; \*CEMENT INDUSTRY; \*BUILDING TRADES

A cooperative effort of the Portland Cement Association and the National Ready Mixed Concrete Association, this instructor's guide is for use in planning and implementing vocational and pre-apprenticeship training for all levels from elementary school through adult education. The occupational focus is on the cement mason and related building trades. The content is divided into 21 units, each covering a particular phase of concrete technology. Each unit contains two parts, of which Part I, the instructor's guide, contains a clearly stated objective, introductory information, presentation outline, application suggestions, and test questions or discussion points. Part II of each unit is the text material from which the instructor's guide has been developed, and covers the teaching outline in detail. Some of the topics covered in the 80-hour course are:

(1) job opportunities, (2) history and uses of concrete, (3) components of concrete, (4) concrete placing, curing, finishing, and testing, (5) tools and related materials, (6) job estimate, (7) reinforcing concrete, and (8) weather conditions and concrete. Supplementary materials include reference and film lists. An accompanying student manual is available from Delmar Publishers, Inc., Mountainview Avenue, Albany, New York 10005. Prices and information on the manual may be obtained by writing to them. (AW)



VT 009 582 Flight Maneuvers Manual for Instructors and Students.

Haldon Books, Inc., Palatine, Ill.
DOCUMENT NOT AVAILABLE FROM EDRS.
Aviation Book Company, 565 1/2 West Glenoaks Blvd., Glendale, California 91202 (\$4.95).
Pub Date - 69 154p.

RESOURCE MATERIALS; \*FLIGHT TRAINING; \*AIRCRAFT PILOTS; \*IDSTRUCTIONAL MATERIALS; \*SUPPLEMENTARY TEXTBOOKS; MANUALS; AVIATION VOCABULARY; \*TECHNICAL EDUCATION

For use by flight training instructors and students, this manual is designed to: (1) aid the student in understanding thoroughly the basic parts of a flight maneuver, (2) provide a foundation for further formal training for commercial or instrument rating, and (3) create a more competent and safer pilot. Although primarily intended for use during actual flight instruction, the manual should be used during the pre-flight period to introduce the beginning student to each new maneuver. The maneuvers have been broken down into parts which include the physical aspects of the skill to be developed, and are presented by visual illustrations for ease in learning. Some of the 28 maneuvers covered are: (1) preflight operations, (2) taxing and takeoff, (3) turns, (4) glides, (5) climbing procedures, (6) level flight, (7) flight patterns, and (8) various types of landings. The manual should be used in conjunction with aircraft owners' manuals and Federal Aviation Administration (FAA) manuals. Much of the material included was researched, compiled, and tested by aviation instructors and educators, and currently is being used in several midwestern flight schools. The illustrations are suitable for reproduction as transparencies or other instructional materials. (AW)

VT 009 588 Winner, Walter P., Ed. Airman's Information Manual. 1969 Special Pilot Training Edition.

Aviation Book Co., Glendale, Calif.
DOCUMENT NOT AVAILABLE FROM EDRS.
Aviation Book Company, 565 1/2 West Glenoaks Blvd., Glendale, California 91202 (\$2.00).
Pub Date - 69 127p.

RESOURCE MATERIALS; MANUALS; \*SUPPLEMENTARY TEXTBOOKS; \*FLIGHT TRAINING; \*AIRCRAFT PILOTS; \*AVIATION VOCABULARY; \*TECHNICAL EDUCATION; INSTRUCTIONAL MATERIALS \*FEDERAL AVIATION ADMINISTRATION; FAA

The primary purpose of this manual is to familiarize student pilots and non-flyers with basic flight procedures, but it can also serve as a valuable "refresher" or reference book for licensed pilots. Largely reprinted from the Federal Aviation Administration (FAA) periodical of the same name, the content is divided into three major sections. Part I, Basic Flight Manual and Air Traffic Control Procedures, contains basic fundamentals required to fly in the National Airspace System, information or flight safety, health and medical facts, Air Traffic Control (ATC) information on rules, regulations, and procedures, a glossary of terms, and related general information. Part II explains the Airport Directory, and Part III discusses Operational Data and Notices to Airmen. Since Parts II and III provide reference-type data that is continually changing, only excerpts from the FAA periodical are given, for study purposes and to acquaint the reader with the nature of the publication. The manual is illustrated with maps, diagrams, and line drawings. (AW)

VT 009 592 Automobile Mechanics: An Outline for Trade and Industrial Programs.

Ohio State Dept. of Education, Columbus. Trade and Industrial Education Service
Kent State Univ., Ohio
MF AVAILABLE IN VT-ERIC SET.
Ohio Trade and Industrial Education Service, Instructional Materials Laboratory, The Ohio State University,
1885 Neil Avenue, Columbus, Ohio 43210 (\$1.00).
Pub Date - 59 34p.

BIBLIOGRAPHIES; \*CURRICULUM GUIDES; \*AUTO MECHANICS; \*TRADE AND INDUSTRIAL EDUCATION; COURSE ORGANIZATION; APPRENTICESHIPS; POST SECONDARY EDUCATION, VOCATIONAL HIGH SCHOOLS

This guide, developed by a committee of teachers, supervisors and teacher educators in a summer workshop, is for local school administrator, supervisor or teacher use in course planning. The material is presented under three headings: Outline, Operations, and Progress Chart Headings and Reference Numbers. Ten major areas are outlined: (1) Engines, (2) Electrical Systems, (3) Fuel Systems, (4) Cooling Systems, (5) Suspension System, (6) Power Train, (7) Steering System, (8) Brakes, (9) General Service, and (10) Accessories. Operations or jobs usually performed are listed. Supplemental material includes: (1) a list of progress chart headings, (2) basic equipment and tools, (3) special equipment and tools, (4) general reference material, and (5) a bibliography. Students should be planning to enter or presently working in automotive mechanical repair service and the teacher should be a skilled tradesman. (GR)

VT 009 615 An Introduction to the Automotive Electrical System. Film Booklet DR-9010.

Delco-Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (10 copies or less no charge, over 10 copies \$.15 per copy).
Pub Date - nd 27p.

\*ELECTRICAL SYSTEMS; ILLUSTRATIONS; \*RESOURCE MATERIALS; STUDY GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS; \*AUTO MECHANICS (OCCUPATION)

The purpose of this booklet is to acquaint the student with the basic elements of the automotive electrical system. Prepared by technical writers of Delco-Remy Division of General Motors Corporation for use in auto mechanics courses, the material is suitable for presentation in either the classroom or the shop. The booklet is concerned largely with the performance function of the automotive electrical system, with secondary emphasis on the safety and convenience functions. The content is divided into four units: (1) The Charging System, (2) The Cranking System, (3) The Ignition System, and (4) General Trouble Shooting, with each unit providing detailed information on the elementary principles involved, as well as care and maintenance procedures. The manual is illustrated with numerous photographs, drawings, and detailed diagrams. (AW)

234 AIM/WINTER 69

VT 009 616 Distributor Coil Generator Regulator: Service Tips.

Delco-Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
DR-9019
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (10 copies or less no charge, over 10 copies \$.25 per copy).
Pub Date - nd 35p.

\*RESOURCE MATERIALS; STUDY GUIDES; \*AUTO MECHANICS; \*AUTO MECHANICS (OCCUPATION); \*TRADE AND INDUSTRIAL EDUCATION; \*ELECTRICAL SYSTEMS; ILLUSTRATIONS

Developed by technical writers of the Delco-Remy Division of General Motors Corporation this manual is for use by vocational education students and instructors in auto mechanics classes. Suitable for use in either a shop or classroom, the booklet is intended to provide tips and helpful hints on servicing the electrical components of modern automobiles and trucks. Contents cover information of a "how to do it" nature on the procedures to follow in servicing the four major parts of the automotive electrical system: (1) Distributor, (2) Ignition Coils, (3) Generator, and (4) Regulators. Step by step procedures are given, each illustrated with line drawings. (AW)

VT 009 617 It's Easy to be an Expert...Battery Man, That Is.

Delco-Remy, Anderson, Ind.
MF AVAILABLE IN VT-ERIC SET.
Technical Literature Section, Delco-Remy, Anderson, Indiana 46011 (10 copies or less no charge, over 10 copies \$.15 per copy).
Pub Date - nd 18p.

\*RESOURCE MATERIALS; STUDY GUIDES; \*TRADE AND INDUSTRIAL EDUCATION; \*AUTO MECHANICS; \*AUTO MECHANICS (OCCUPATION); \*ELECTRIC BATTERIES

Technical writers of the Delco-Remy Division of General Motors Corporation prepared this manual for shop or classroom use by teachers and students in auto mechanics courses. The booklet gives step-by-step procedures for testing and troubleshooting automotive batteries. Each step is illustrated with drawings or photographs. Recommended battery testing equipment is listed. (AW)



GENERAL VOCATIONAL AND TECHNICAL EDUCATION SECTION



AIM/WINTER 69

VT 006 188 ED 029 946 Occupations for You. Part Two.

Allington Corporation, Alexandria, Va. EDRS PRICE MF-\$0.50 HC-\$5.70 Pub Date - Mar68 112p.

\*OCCUPATIONAL INFORMATION; \*CAREER PLANNING; \*STUDY GUIDES; \*OCCUPATIONAL GUIDANCE; SERVICE OCCUPATIONS; SALES OCCUPATIONS; CLERICAL OCCUPATIONS; WORK ENVIRONMENT; JOB SKILLS; EDUCATIONAL NEEDS; EMPLOYMENT QUALIFICATIONS; WAGES; EMPLOYMENT PROJECTIONS; INFORMATION SOURCES

The booklet is intended to assist young people to secure information important to making vocational choices. Information about the following workers is included: (1) cashiers, (2) keypunch operators, (3) mail carriers and postal clerks, (4) secretaries, (5) shipping and receiving clerks, (6) stock clerks and general stock handlers, (7) typists, (8) outside salesmen, (9) sales clerks, (10) barbers, (11) beauty operators, (12) drycleaners, (13) hospital attendants and nurse aides, (14) laundry workers, (15) licensed practical nurses, (16) taxi drivers, (17) telephone operators, (18) waiters and waitresses, (19) commercial artists, (20) factory assemblers, (21) firemen, (22) policemen and policewomen. For each group, information is organized under the headings: (1) What They Do, (2) Training and Requirements, (3) Earnings and Working Conditions, (4) Employment Outlook, and (5) Where to Get Further Information. ED 017 704 (VT 004 469, AIM Summer 1968) is a related document which supplies information about other occupations. (JK)

VT 007 228 ED 029 951
Salsbury, Marilyn L., Comp.
Occupational Communication Competencies; A List of Audio-Visual Aids for Helping Pupils Acquire Occupationally Useful Oral Communication Capabilities.

Washington State Univ., Pullman. Audio Visual Center Washington Research Coordinating Unit for Vocational Education, Olympia EDRS PRICZ MF-\$0.50 HC-\$3.75 Pub Date - Jun68 23p.

\*ANNOTATED BIBLIOGRAPHIES; \*ORAL COMMUNICATION; \*COMMUNICATION SKILLS; \*AUDIOVISUAL AIDES; \*VOCATIONAL EDUCATION; FILMS; FILMSTRIPS; TAPE RECORDINGS; LISTENING SKILLS; SECONDARY GRADES; COLLEGES

This bibliography of 83 films, filmstrips, and tapes has been assembled for use by teachers in helping pupils acquire oral communication competence. A major part of occupationally useful oral communication is a combination of the speaking and listening skills that enable people to exchange information and decide how they will proceed with their work. Therefore, these audio-visual materials are grouped in classifications of communications-general, listening, conversation/discussion, supportive skills, and on-the-job communication. For each item the following information is given: film title, producer, date, length, sound or silent, color or black and white, grade level of audience, and a description of content. Information about sources for purchase or rental cost is included for each entry. (CH)

VT 007 687 ED 029 953 Strait, Don; Hartzler, F.E. Principles and Philosophy of Vocational Education.

Kansas State Board for Vocational Education, Topeka Kansas State Teachers Coll., Emporia EDRS PRICE MF-\$0.50 HC-\$5.75 Department of Business, Kansas State Teachers College, Cremer Hall, Emporia, Kansas 66801 (\$2.50). Pub Date - 67 113p.

\*VOCATIONAL EDUCATION, \*PROGRAMED TEXTS; \*TEACHER EDUCATION; VOCATIONAL TEACHERS; ORIENTATION MATERIALS; PRESERVICE EDUCATION; COLLEGE STUDENTS; INDIVIDUAL INSTRUCTION; PROGRAMED MATERIALS; \*EDUCATIONAL PHILOSOPHY; FEDERAL LAWS; \*EDUCATIONAL PRINCIPLES

The principles and philosophy of vocational education are presented in this document in programed instruction form for use by potential vocational education teachers in teacher preparation courses in colleges or universities. Orientation and basic terminology is included under headings of: (1) The Place of Vocational Education, (2) Vocational Education Defined, (3) Types of Vocational Education Students, (4) Vocational Areas and Services, (5) Vocational Instruction, (6) Coordination of Instruction and Work, (7) Occupational Concept and Vocational Education, and (8) Review of the Federal Acts. The material was developed by college instructors for individualized instruction and revised after field trial. The document is mimeographed. (DM)

Curtis, Earle E. Vocational Education, A Dramatization.

American Vocational Association, Washington, D.C.
MF AVAILABLE IN VT ERIC SET.
Pub Date - May68 18p.; Dramatization presented at Annual American Vocational Association Convention (Cleveland, Dec. 6, 1967).

\*SKITS; \*HISTORICAL REVIEWS; \*VOCATIONAL EDUCATION; \*FEDERAL LEGISLATION; \*OBJECTIVES

The script of this dramatization is presented here for adaptation to accomplish such purposes as acquainting civic, church, and community groups with aspects of vocational education. Quotations of Samuel Gompers, Theodore Roosevelt, William Allen White, Jane Addams, John Dewey, Dudley Hughes, Hoke Smith, and Thomas Jefferson are included, and the history of vocational education legislation is traced from 1917 to 1967. The script concludes with a projection of accomplishments between 1967 and 1992. (JK)

VT 008 193 Occupational Instructors Handbook Manpower Development Training,

Tennessee State Board for Vocational Education, Nashville MF AVAILABLE IN VT-ERIC SET. Vocational Curriculum Laboratory, Box 1114, Murfreesboro, Tennessee 37130 (\$3.75). Pub Date - 68 139p.

\*SUPPLEMENTARY TEXTBOOKS; \*ADULT VOCATIONAL EDUCATION; \*MANPOWER DEVELOPMENT; VOCATIONAL EDUCATION TEACHERS; \*EDUCATIONAL METHODS; TEACHING METHODS; \*TEACHER EDUCATION; RECORDS (FORMS); TEACHER RESPONSIBILITY; COURSE



AIM/WINTER 69

ORGANIZATION; TEACHER QUALIFICATIONS; SAFETY EDUCATION; OCCUPATIONAL GUIDANCE; COMMUNICATION SKILLS; LESSON PLANS \*MANPOWER DEVELOPMENT AND TRAINING ACT PROGRAMS; MDTA PROGRAMS

This teaching guide is designed for use with beginning Manpower Development Training (MDT) instructors in Tennessee. The guide was developed primarily by MDT teacher educators who conduct the course on an itinerant basis throughout the state. The content focuses on the organization of a course of instruction, methods of instruction, shop organization and management, and safety. The length of instruction is fitted to the 10-hour orientation required of all beginning MDT instructors. Requirements for using the materials consist of occupational competency in the area to be taught. (CH)

 $\frac{\text{VT 008 231}}{\text{A Guide to Highway}}$  Safety and Driver Education. Bulletin 395.

Pennsylvania State Dept. of Public Instruction, Harrisburg. Div. of Highway and Aviation Education MF AVAILABLE IN VT-ERIC SET.
Pub Date - 68 73p.

\*TEACHING GUIDES; \*CURRICULUM GUIDES; \*DRIVER EDUCATION; SECONDARY GRADES; ELEMENTARY GRADES; \*SAFETY EDUCATION; GLOSSARIES; BIBLIOGRAPHIES; RECORDS (FORMS)

This guide is for teacher use in planning instruction for elementary and secondary school students in driver education. The elementary program in traffic safety education stresses aspects of traffic safety including pedestrian, bicycle, motor vehicle and traffic control. The junior high school program utilizes classroom instruction elaborating in more depth on the aspects of the elementary program. The senior high school emphasis is on driver education with classroom and laboratory instruction. Students under the age of 16 years are limited to classroom instruction while students 16 years of age and over may participate in practical instruction in the operation of motor vehicles on the public highways and other approved areas. Course outlines and/or simulated experiences are provided for both classroom and laboratory instruction. In addition to a glossary, bibliography, and sample record forms, the guide discusses a comprehensive approach to highway safety education with emphasis on organization in administration, federal and state legislation, and planning for instruction. (CH)

VT 008 456 Economic Education Scope and Sequence Chart, 1969. A Handbook.

Florida State Dept. of Education, Tallahassee DOCUMENT NOT AVAILABLE FROM EDRS. Florida State Dept. of Education, Tallahassee, Florida 32304. Pub Date - 69 28p.

\*CHARTS; \*CURRICULUM; \*ARTICULATION (PROGRAM); \*ECONOMICS; BUSINESS EDUCATION; HOME ECONOMICS EDUCATION; INDUSTRIAL ARTS; SOCIAL STUDIES; VOCATIONAL AGRICULTURE; ELEMENTARY GRADES; SECONDARY GRADES

Developed by a committee of teachers, educational consultants, and administrators, this handbook and scope and sequence chart is intended to assist in coordinating and articulating economic programs from kindergarten through grade 12. Its primary purpose is to provide a framework to aid the teacher or the curriculum committee in planning and teaching economic concepts. The chart is divided into primary and intermined sections for the planning and teaching economic concepts. The chart is divided into primary and intermined sections for the planning and teaching economic concepts. The chart is divided into primary and intermined sections for the planning and teaching economic concepts, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 program, and into the areas of business education, home economics, industrial arts, kindergarten through grade 6 progra

VT 008 555

Jones, Sheila

Design of Instruction. Training Information Paper 1.

Department of Employment and Productivity, London (England)
DOCUMENT NOT AVAILABLE FROM EDRS.
Sales Section, British Information Service, 845 Third Avenue, New York, New York 10022.
Pub Date - 68 30p.

\*PROGRAM GUIDES; INSTRUCTIONAL MATERIALS; \*VERBAL COMMUNICATIONS; \*INDUSTRIAL TRAINING; TEACHER EDUCATION; EDUCATIONAL PROGRAMS; \*TRADE AND INDUSTRIAL EDUCATION; \*FOREIGN COUNTRIES; COMMUNICATION SKILLS ENGLAND

This guide, the first in a series on the design of instruction, was developed to help identify training needs and to formulate training policy for oral instruction. Included are: (1) Introduction, (2) Factors Influencing Effective Verbal Communication, (3) Effect of Sequence of Words (and Operations) Within an Instruction, (4) Instructions, Self-Instruction and Performance, (5) The Presentation of Complex Inter-Related Rules, and (6) Conclusions. (GR)

VT 008 880 Books for Training Officers, 1967.

National Book League, London (England)
British Association for Commercial and Industrial Education, London (England)
MF AVAILABLE IN VT-ERIC SET.
British Association for Commercial and Industrial Education, 26a Buckingham Palace Road, London, S.W. 1, England.
Pub Date - Aug67 64p.

\*ANNOTATED BIBLIOGRAPHIES; \*VOCATIONAL EDUCATION; TECHNICAL EDUCATION; \*FOREIGN COUNTRIES; \*INSTRUCTIONAL MATERIALS; SUPERVISORY TRAINING; MANAGEMENT EDUCATION; INDUSTRIAL TRAINING; TRAINING TECHNIQUES; HUMAN RELATIONS; PROGRAMED INSTRUCTION ENGLAND

This annotated bibliography is composed of 226 citations ranging in date from 1954 to 1967; major emphasis is on the 1962 to 1967 period. The book list was compiled to assist individuals wishing to locate the main publications on major aspects of training and training departments, industrial training boards, and other organizations which plan to establish a basic training library. Listings are arranged alphabetically by author under topical divisions which include: (1) Training Practice-General Works, (2) Operator Training, (3) Training



of Technicians and Technologists, (4) Commercial and Clerical Training, (5) Supervisory Training, (6) Management Training, (7) Training Aids, (8) Training Techniques, and (9) Programmed Instruction. A list of names and addresses of publishers is included. (CH)

VT 009 055
Berndt, William, Comp.
Curriculum Materials for Agricultural Education, Distributive Education, Health Occupations, Home Economics, Office Occupations, Technical Education, and Trade and Industrial Education. Annotated Listing of Materials Available from Public Education Agencies.

Office of Education (DHEW), Washington, D.C. Div. of Vocational and Technical Education MF AVAILABLE IN VT-ERIC SET.
Pub Date - Mar69 156p.

\*ANNOTATED BIBLIOGRAPHIES; \*INSTRUCTIONAL MATERIALS; \*VOCATIONAL EDUCATION; AGRICULTURAL EDUCATION; BUSINESS EDUCATION; DISTRIBUTIVE EDUCATION; HEALTH OCCUPATIONS EDUCATION; HOME ECONOMICS EDUCATION; TRADE AND INDUSTRIAL EDUCATION

This annotated bibliography is a listing of curriculum materials available from public education agencies for seven areas of vocational education. Within each vocational division, listings are arranged alphabetically by subject, with each separate subject area subdivided according to state. Entries in each division include materials for use by students, teachers, administrators, and coordinators, and range in date from 1963 to 1968. Availability sources and prices for all entries are given. (AW)

VT 009 076
Roberts, Roy W.; Hunt, Elizabeth E.
Reports of Consultants and Advisory Specialists. Volume X-A: Industrial and Practical Arts, Vocational Education, and General Adult Education.

Leflore County School District, Miss.
MF AVAILABLE IN VT-ERIC SET.
Leflore County Schools, Highway 82 West, Greenwood, Mississippi 38930 (\$2.00).
Pub Date - Jan69 31p.

\*VOCATIONAL EDUCATION; \*PRACTICAL ARTS; \*EDUCATIONAL PROGRAMS; ADULT EDUCATION; \*CURRICULUM DEVELOPMENT; AREA VOCATIONAL SCHOOLS; \*CURRICULUM PLANNING; HIGH SCHOOL CURRICULUM; ELEMENTARY SCHOOL CURRICULUM; EDUCATIONAL FACILITIES; COURSE CONTENT \*LEFLORE COUNTY MISSISSIPPI SCHOOL DISTRICT

A vocational, practical arts, and general adult education program for grades K through 12 is described which includes the development of an area vocational-technical school in which some courses would be offered at the post-high school level for adults. It is suggested that a complete program of practical arts be offered to include: (1) agriculture and forestry, (2) homemaking, (3) industrial arts, (4) health occupations, (5) business occupations, and (6) distributive occupations. The course content would be arranged in units of 6 to 9 weeks each and would allow proficient students to omit a unit or complete a unit in less than the allocated time. Specific course content would be fitted to the students interest and abilities. In grades K through 6, a corner of the home room would be properly equipped for practical arts. An industrial arts laboratory would be provided in the junior and senior high schools. A variety of vocational and technical courses are identified as needed for a more comprehensive program. (CH)

VT 009 234
Ragelbarger, David; Fingerman, Saul
An Instructional Manual for CARDIAC: A Cardboard Illustrative Aid to Computation.

Bell Telephone Laboratories, New York, N.Y.
DOCUMENT NOT AVAILABLE FROM EDRS.
Garden State/Novo, Inc., 630 Ninth Avenue, New York, New York 10036 (\$1.00).
Pub Date - Oct68 70p.

INSTRUCTIONAL MATERIALS; \*INSTRUCTIONAL AIDS; \*COMPUTERS; \*COMPUTER SCIENCE; \*COMPUTER PROGRAMS; \*TECHNICAL EDUCATION; COMPUTER SCIENCE EDUCATION; PROGRAMERS; SECONDARY GRADES \*CARDBOARD ILLUSTRATIVE AID TO COMPUTATION; CARDIAC

Developed by technical personnel of Bell Telephone Laboratories and tested both in classrooms and by representatives from National Science Teachers Association and National Council of Teachers of Mathematics, this instructional manual and Cardboard Illustrative Aid to Computers (CARDIAC) is for use by high school students as a practical aid to understanding computers and computer programing. Contents include 16 sections, covering: (1) What CARDIAC Is--and Isn't, (2) Basic Units of a Simple Computer, (3) Communicating with Computers, (4) Flow Charts, (5) Instructions, Data, and Addresses, (6) Converting SIMCO to the Stored Problem Mode, (7) Introducing CARDIAC, (8) The First Program, (9) Loops, (10) Getting Out of Loops, (11) Multiplication, (12) Shifting Digits, (13) Bootstraps and Loading Programs, (14) Subroutines, (15) Developing Programs, and (16) Programs for Writing Programs. The manual and aid are recommended for average or above average students ranging in age from 16-18 years, and the teacher presenting the material should have a bachelor's degree and 2-3 years teaching experience. The suggested time for covering the material is 4-20 hours, depending on the students' interest, desire, and ability. A selected bibliography on computers is included. (AW)

VT 009 235 Occupational Services Academic Curriculum. Mathematics Resource Book, Grade 10.

Penn Hills School District, Pittsburgh, Pa. MF AVAILABLE IN VT-ERIC SET. Pub Date - Jun69 180p.

\*CURRICULUM GUIDES; \*RESOURCE MATERIALS; RESOURCE UNITS; OCCUPATIONAL CLUSTERS; GRADE 10; \*MATHEMATICAL APPLICATIONS; \*PRACTICAL MATHEMATICS; \*VOCATIONAL EDUCATION

This mathematics resource book was developed by secondary and college teachers and consultants for use by teachers and students in 10th grade mathematics classes comprising part of an occupational services curriculum. The exercises, problems, and other activities given are designed to provide students with an opportunity to develop the skills and understandings necessary in a mathematics curriculum; the resource book is intended as a source of exercises for class discussion or assignments, at the teacher's option. Student exercises are given for six general problem areas, including: (1) mathematical sets and their practical applications, (2) statistics and probability and their relationship to making everyday decisions, (3) algebra as a means of strengthening mathematical abilities and problem solving, (4) principles of similarity and their vocational applications, (5) consumer education, and (6) practical relationship of mathematics to computer operations.



AIM/WINTER 69 239

The exercises are illustrated with numerous charts, graphs, tables, and geometric figures. Suggested time allotment for covering the materia is one school term, and the teacher should be certified in mathematics. This resource book is one of a series, published by the Penn Hills School District, Pittsburgh, Pennsylvania, for use with the occupational services curriculum. (AW)

VT 009 236
DeVito, Raymond, And Others
World Cultures Resource Book; Grade 10.

Penn Hills School District, Pittsburgh, Pa.
MF AVAILABLE IN VT-ERIC SET.
Pub Date - Aug68 239p.; For use with "Scholastic World Affairs Multi-Text."

\*CURRICULUM GUIDES; \*RESOURCE MATERIALS; RESOURCE UNITS; \*SOCIAL STUDIES; \*SOCIAL STUDIES UNITS; \*CULTURE; VOCATIONAL EDUCATION; CULTURAL AWARENESS; CROSS CULTURAL STUDIES; GRADE 10; OCCUPATIONAL CLUSTERS

This world cultures resource book was developed by teachers and consultants for use by 10th grade social studies students enrolled in an occupational services curriculum. It is intended to supplement the basic course text, "Scholastic World Multi-Text" (New York: Scholastic Book Services, 1964). The purpose of the book is to help students to strengthen their knowledge of world history and to analyze and interpret interrelations between the social sciences. The content covers seven problem areas, including: (1) general study of world cultures, (2) the role of Asia in the modern world, (3) the role of the Middle East as the modern world's crisis center, (4) the cultural effect of Europe on the modern world, (5) communism, (6) Latin America, and (7) the development, problems, and world role of black Africa. Each problem area provides study guides, map study, vocabulary, sample tests, and learning activities such as games and puzzles designed to increase student interest. The one-term course should be taught by a certified social studies teacher. This resource book is one of a series published by the Penn Hills School District, Pittsburgh, Pennsylvania. (AW)

<u>VT 009 238</u> Occupational Services Academic Curriculum, English, Social Studies, Mathematics, Science, Grade 10.

Penn Hills School District, Pittsburgh, Pa. MF AVAILABLE IN VT-ERIC SET. Pub Date - Apr68 284p.

\*CURRICULUM GUIDES; VOCATIONAL EDUCATION; TEACHING GUIDES; \*ENGLISH CURRICULUM; ENGLISH; \*MATHEMATICS CURRICULUM; MATHEMATICS; \*SCIENCE CURRICULUM; \*SOCIAL STUDIES; OCCUPATIONAL CLUSTERS; GRADE 10

This 10th grade occupational services academic curriculum guide is comprised of course outlines for the subject areas of mathematics, English, science, and social studies. Developed by committees of teachers and subject area consultants, these outlines are part of a series published by the Penn Hills School District, Pittsburgh, Pennsylvania. For teacher use in course and lesson planning, the four course guides list unit topics to be covered in each subject area, and include objectives, knowledge and skills to be developed, and teaching suggestions for each topic. Some units provide suggested resources, vocabularies, learning activities, and suggestions for testing and evaluating student progress. Courses are designed for one school term and should be taught by teachers certified in the respective subject areas. (AW)

<u>VT 009 240</u> Occupational Services Academic Curriculum. English Resource Book, Grade 9.

Penn Hills School District, Pittsburgh, Pa. MF AVAILABLE IN VT-ERIC SET. Pub Date - Aug68 288p.

\*CURRICULUM GUIDES; \*RESOURCE MATERIALS; RESOURCE UNITS; \*ENGLISH; ENGLISH CURRICULUM; \*COMMUNICATION SKILLS; \*READING DEVELOPMENT; VOCABULARY DEVELOPMENT; VOCABULARY SKILLS; VOCABULARY; VERBAL DEVELOPMENT; READING; LITERATURE; WRITING SKILLS; OCCUPATIONAL CLUSTERS; VOCATIONAL EDUCATION; GRADE 9

One of a series published by the Penn Hills School District, Pittsburgh, Pennsylvania, this English resource book was developed by teachers and consultants for use by ninth grade students enrolled in an occupational services curriculum. Topics covered in the resource book include: (1) imaginative word usage, (2) communication, (3) practical correspondence, (4) occupational preparation and planning, (5) study of the novel, and (6) study of news media. The first part of the book contains short fictional pieces chosen for their reader appeal, with questions to be answered and vocabulary lists. The remaining sections include suggested learning activities, problems to be solved, writing and speaking skills to be developed, occupational questionnaires, and reference materials. The book is illustrated with photographs and line drawings. The one-term course should be taught by a certified English teacher. (AW)

<u>VT 009 242</u> Occupational Services Academic Curriculum. Mathematics Resource Book, Grade 9.

Penn Hills School District, Pittsburgh, Pa. MF AVAILABLE IN VT-ERIC SET. Pub Date - Apr68 148p.

\*CURRICULUM GUIDES; \*RESOURCE MATERIALS; RESOURCE UNITS; \*PRACTICAL MATHEMATICS; VOCATIONAL EDUCATION; GRADE 9; \*MATHEMATICAL APPLICATIONS; OCCUPATIONAL CLUSTERS

One of a series published by the Penn Hills School District, Pittsburgh, Pennsylvania, this mathematical resource book was developed by teachers and consultants for use by ninth grade students enrolled in an occupational services curriculum. The content consists of several sets of exercises and problems for each of the following problem areas: (1) relationship of logic to mathematics. (2) concept of sets in numerical reasoning and problem solving, (3) understanding geometry, (4) use of mathematical symbols, (5) basic mathematical operations, (6) practical applications of fundamental mathematical concepts, (7) rational numbers, (8) ratio and proportion as practical tools, (9) use of percents in everyday living, (10) measurement of geometric figures as a means of appreciating one's environment, (11) understanding and uses of algebra, and (12) relationship of statistics and probability to practical decision making. The one-term course should be taught by a certified mathematics teacher. (AW)

VT 009 249
Occupational Services Academic Curriculum, English, Social Studies, Mathematics, Science, Grade 9.

Penn Hills School District, Pittsburgh, Pa. MF AVAILABLE IN VT-ERIC SET. Pub Date - Apr68 398p.



240 AIM/WINTER 69

\*\*CURRICULUM GUIDES; TEACHING GUIDES; \*ENGLISH CURRICULUM; ENGLISH; \*MATHEMATICS CURRICULUM; MMATHEMATICS; \*SCIENCE CURRICULUM; \*SOCIAL STUDIES; VOCATIONAL EDUCATION; OCCUPATIONAL CLUSTERS; GRADE 9

This ninth grade occupational services academic curriculum guide is comprised of course outlines for the subject areas of English, mathematics, science, and social studies. Developed by committees of teachers and subject area consultants, these outlines are part of a series published by the Penn Hills School District, Pittsburgh, Pennsylvania, For use by teachers in course and lesson planning, the four course guides present topics to be covered in each subject area, and include objectives, skills and understandings to be developed, suggested techniques for implementing instruction, teacher and student resources, learning activities, and suggestions for evaluating student progress. The courses should be conducted by teachers certified in the respective subject fields. (AW)

VT 009 432 Cohen, Bernard H. Free Teaching Materials for Adult Vocational Programs. Dunlap Monograph No. 3.

Dunlap and Associates, Inc., Darien, Conn.
DOCUMENT NOT AVAILABLE FROM EDRS.
Dunlap and Associates, Inc., One Parkland Drive, Darien, Connecticut 06820 (\$1.00).
Pub Date - Feb69 36p.

\*BIBLIOGRAPHIES; \*ANNOTATED BIBLIOGRAPHIES; \*INSTRUCTIONAL MATERIALS; \*INSTRUCTIONAL AIDS; \*ADULT VOCATIONAL EDUCATION; TRADE AND INDUSTRIAL EDUCATION; DISTRIBUTIVE EDUCATION; BUSINESS EDUCATION; MATHEMATICS; TECHNICAL EDUCATION

This monograph is designed to aid teachers of adult vocational training programs in obtaining instructional materials that are specifically relevant to the adult program. Contents include an introductory section stressing the need for such educational materials, two sample lesson plans illustrating the application of the listed publications to adult vocational programs, information on ordering the publications, and the list of publications. The teaching materials are organized under the topics: (1) machine shop occupations, (2) maintenance men, carpenter's helpers, and related areas, (3) commercial occupations, (4) merchandising-distributive occupations, (5) automotive occupations, (6) materials useful for all trade areas, and (7) mathematics for trades. The source of availability is given for each publication and brief annotations are supplied for many. (AW)

VT 009 856 ED 034 074 Microfiche Collection of Clearinghouse Documents Reported in Abstracts of Instructional Materials in Vocational and Technical Education (AIM), Fall 1969.

Ohio State Univ., Columbus. Center for Vocational and Technical Education Office of Education (DHEW), Washington, D.C. EDRS PRICE MF-\$70.00 HC NOT AVAILABLE FROM EDRS. Pub Date - 69 19,585p.

\*INSTRUCTIONAL MATERIALS; \*VOCATIONAL EDUCATION; \*TECHNICAL EDUCATION; BUSINESS EDUCATION; AGRICULTURAL EDUCATION; DISTRIBUTIVE EDUCATION; HEALTH OCCUPATIONS EDUCATION; HOME ECONOMICS EDUCATION; INDUSTRIAL ARTS; TRADE AND INDUSTRIAL EDUCATION; INDEXES (LOCATERS); CLEARINGHOUSES

Documents announced with VT numbers only in the Fall 1969 issue (VT 009 857) of "Abstracts of Instructional Materials in Vocational and Technical Education" (AIM) are included in this microfiche set. The microfiche set is arranged in the following sequence: (1) a Vocational Technical (VT) number index to documents in the microfiche collection, (2) the author and subject index from AIM, and (3) the full text of documents listed in the VT number index. The texts are filmed continuously in VT number sequence. (BS)

VT 009 857 ED 034 075 Abstracts of Instructional Materials in Vocational and Technical Education (AIM), Fall 1969.

Ohio State Univ., Columbus. Center for Vocational and Technical Education Office of Education (DHEW), Washington, D.C. EDRS PRICE MF-\$0.75 HC-\$8.90 ERIC Clearinghouse for Vocational and Technical Education, The Ohio State University, 1900 Kenny Road, Columbus, Ohio 43210 (quarterly--fall, winter, spring, summer, \$9.00 per year). Pub Date - 69 176p.

\*ANNOTATED BIBLIOGRAPHIES; \*INSTRUCTIONAL MATERIALS; \*VOCATIONAL EDUCATION; \*TECHNICAL EDUCATION; BUSINESS EDUCATION; AGRICULTURAL EDICATION; INDUSTRIAL ARTS; DISTRIBUTIVE EDUCATION; HEALTH OCCUPATIONS EDUCATION; HOME ECONOMICS EDUCATION; TRADE AND INDUSTRIAL EDUCATION; INDEXES (LOCATERS); CLEARINGHOUSES

This quarterly publication announces the availability of instructional materials acquired and processed by the Educational Resources Information Center (ERIC) Clearinghouse on Vocational and Technical Education. It should be of particular interest to teachers, curriculum specialists, supervisors, and administrators involved in curriculum development or the use of instructional materials in the teaching-learning setting. Each abstract, a condensation of the report in about 200 words, usually includes the means used to develop the material, the setting for use of the material, and source of available copies. Abstracts are included under the following sections: Agricultural, Business and Office, Distributive, Health Occupations, Home Economics, Industrial Arts, Technical, Trade and Industrial, and General Vocational and Technical Education. An author index, document number index, and subject index are provided. Most of the documents which have not been announced in "Research in Education," are available as a separate microfiche set from the ERIC Document Reproduction Service (VT 009 856). Others are available from the source identified in the abstract. (EL)

ERIC Full Text Provided by ERIC

INDEXES



P	NGE	K F	n G E
AC GENERATORS VT 008 806 Introducing the Delcotron Generator and the Charging Circuit.	224	AEROSPACE TECHNOLOGY VT 008 269 ED 026 273 Space Resources for the High School. Industrial Arts Resource Units.	207
ACCIDENT PREVENTION VT 008 724 Safety Handbook: A Guide for Trade and Industrial Education Programs.	223	AGRICULTURAL CHEMICAL OCCUPATIONS VT 009 566 Weed Control, Cultural and Chemical.	179
The Training of Accountants.	187 187	AGRICULTURAL EDUCATION VT 007 699 ED 027 400 A Description and Source Listing of Professional Information in Agricultural Education, 1964-65, 1965-66.	163
ACHIEVEMENT RATING VT 008 648 Job Corps Training Standard for Painter-	223	VT 008 079 ED 029 961 Grain, Feed, Seed, and Farm Supply Technology. A Suggested 2-Year Post High School Curriculum.	163 164
ACHIEVEMENT TESTS VT 005 237 Home Economics Evaluation Services in the Junior High School.	198	Farm Business Management Report, 1968. VT 008 949 How to Grade Furs.	164
VT 008 276 Evaluation Guide for Homemaking Education. VT 009 610 Office Procedures Used in the	199 180	Books and Reference Material for Use in North Dakota Vocational Agriculture Departments.	165 166
Adricultural Services.  ADHESIVES VT 007 858 ED 031 557 Adhesives: A Base Syllabus on Wood	206	Curriculum Guide for Ornamental Horticulture. VT 009 282 Grounds Care: Custodial Training Course.	166
Technology.  ADMINISTRATIVE POLICY VT 006 462 Industrial Arts Teachers Handbook.	204	AGRICULTURAL ENGINEERING VT 007 848 Hydraulic Systems for the Farm. Resource Unit and Skill Text.	163
ADULT FARMER EDUCATION VT 008 646 Farm Business Management Report,	164	VT 009 078 Consumable Supply List for Farm Mechanics and General Shop. VT 009 079 Suggestions for Equipping the Farm	165 165
ADULT VOCATIONAL EDUCATION VT 008 193 Occupational Instructors Handbook Manpower Development Training.	236	Mechanics Shop. VT 009 177 Resource Material for Teaching Agricultural Mechanics. VT 009 297	166 168
vr 008 910 Bookkeeper II. Vr 008 911 Bank Teller.	186 226	Small Gasoline Engines, (Ornamental Horticulture). VT 009 301 Tool Identification Manual.	169
VT 009 047 Secretarial Skills and Procedures. Adult Course Outline. VT 009 432	187	VT 009 339 Introduction to Irrigation. VT 009 341 Use of the Level: Setting Up the	177 177
Pree Teaching Materials for Adult Vocational Programs.  AEROSPACE INDUSTRY		Instrument. VT 009 390 Electrical Wiring. VT 009 567	178 179
VT 008 269 ED 026 273 Space Resources for the High School. Industrial Arts Resource Units.	207	Plows and Plowing.	



P	AGE	P.1	AGE
AGRICULTURAL MACHINERY		ANIMAL CARETAKERS	
VT 008 642	164	VT 009 320 Fundamentals of Equitation.	173
A Guide for Planning Occupational Programs in Agricultural		VT 009 327	175
Mechanization.		Catching and Handling Poultry.	
VT 009 567	179	ANIMAL SCIENCE	
Plows and Plowing.			164
AGRICULTURAL MACHINERY OCCUPATIONS		How to Grade Furs.	4 == 1.
VT 008 642	164	VT 009 325 Pre-Natal Development of the Calf.	174
A Guide for Planning Occupational Programs in Agricultural		Fre-Margi beveropment or the carra	
Mechanization.		ANNOTATED BIBLIOGRAPHIES	
			236
AGRICULTURAL PRODUCTION VT 008 042	163	Occupational Communication Competencies: A List of	
Basic Curriculum for Vocational	100	Audio-Visual Aids.	
Agriculture in Texas. Production		VA 00. 000	163
Agriculture.	170	A Description and Source Listing of Professional Information in	
The Brood Sow and Litter.	170	Agricultural Education, 1964-65,	
VT 009 322	173	1965-66.	
Evolution in Marketing Farm		VT 008 577 Audio-Visual Aids Relating to the	221
Products. VT 009 338	177	Graphic Arts.	
Beef Cattle, Part I, Castration.		VT 008 880	237
		Books for Training Officers.	238
AGRICULTURAL SUPPLY OCCUPATIONS VT 008 079 ED 029 961	163	VT 009 055 Curriculum Materials. Annotated	<b>43</b> 0
Grain, Feed, Seed, and Farm Supply	105	Listing of Materials Available from	
Technology. A Suggested 2-Year Post	:	Public Education Agencies.	<b>.</b>
High School Curriculum.	180	VT 009 432 Free Teaching Materials for Adult	240
VT 009 610 Office Procedures Used in the	100	Vocational Programs.	
Agricultural Services.		VT 009 857	240
A A D T A WAR A WA		Abstracts of Instructional Materials in Vocational and	
AGRICULTURAL TECHNICIANS VT 008 079 ED 029 961	163	Technical Education (AIM), Fall	
Grain, Feed, Seed, and Farm Supply		1969.	
Technology. A Suggested 2-Year Post	:	ADDDENSTARGUEDA	
High School Curraculum.		APPRENTICESHIPS VT 000 717	212
AGRICULTURE ENGINEERING		Plumbing Related Course for	
VT 009 317	172	Apprentices, Part II, Learner's	
Use of the Level: Reading the Rod.		Manual. VT 008 374	185
AGRONOMY		A Training Officer's Guide to	
VT 009 303	169	Commercial Apprenticeship.	240
Experiments in Soil Science.		VT 008 415 Recommendations for Craft	219
AIRCRAFT PILOTS		Apprentice Training 1966.	
VT 009 582	233	VT 008 569	221
Flight Maneuvers Manual for		Training Recommendations. Operatives.	
Instructors and Students. VT 009 588	233		221
Airman's Information Manual. 1969		Industrial Technical Mathematics II	
Special Pilot Training Edition.		for Plumbers.	223
AMERICAN INDIANS		VT 008 633 Monitoring of On-Job Training of	223
VT 008 791 ED 030 744	195	Craft Apprentices in Electricity	
Dental Assistant Training; Standard	1	Boards Concerned with Distribution.	225
Course Outline.		VT 008 838 Planning and Supervision of Stage	225
ANATOMY		IV Training for Craft Apprentices.	
VT 009 308	170	VT 008 841	227
Anatomy of the Fowl.	174	Recommendations for the Training of Boilermaker, Welder and Blacksmith	
VT 009 326  How to Do a Poultry Autopsy.	1/4	Apprentices.	



I	PAGE	Ъ	AGE
VT 009 022	227	VT 006 740	213
A New Craft Is Born; An Apprenticeship Program for Chemical Process Operator.	1	A.E.A. Tune-Up System; 1968 Wiring Diagrams. Supplement to the A.E.A. Tune-Up Specification Charts.	
VT 009 366 The Training of Mates as Linesmen (Steel Tower Lines).	229	VT 008 805 The Cranking Circuit (and How It Works).	224
VT 009 367 Monitoring of On-Job Training of	229		224
Craft Apprentices in Electricity Boards Concerned with Generation. VT 009 368	229	VT 008 807 Let's Talk Energizers and Batteries	224
The Training of Operatives in Electricity Boards Concerned with Distribution.		Regulation and the Charging	224
VT 009 371 The Training of Jointers as Jointers (Extra High Tension).	230	Circuit. VT 008 809 20,000 Volts under the Hood: The	225
VT 009 372 The Training of Mates as Jointers. VT 009 373	230 230	Charging Ignition and Cranking	226
The Training of Mates as Linesmen (Wood-Pole). VT 009 374	231	Systems: Periodic Maintenance and Circuit Checks. VT 009 592	233
The Training of Craft Apprentices. VT 009 376 Craft Apprentice Training	231	Automobile Mechanics; An Outline for Trade and Industrial Programs. VT 009 615	233
Programmes for Electricians, Electrical Fitters, and Meter Mechanicians in Electricity Boards		An Introduction to the Automotive Electrical System.	234
Concerned with Distribution. VT 009 377 Craft Apprentice Training	231	Distributor Coil Generator Regulator: Service Tips.	234
Programmes for Mechanical Fitters, Electrical Fitters, and Instrument Mechanics in Electricity Boards		It's Easy to be an ExpertBattery Man, That Is.	
Concerned with Generation. VT 009 378 The Training of Jointers and		AUTO MECHANICS (OCCUPATION) VT 001 950 ED 023 786 Auto Mechanics; Methodology. Technical Instruction Manual.	212
Linesmen's Mates in Electricity Boards Concerned with Distribution. VT 009 379 The Training of Student Engineering	232	VT 004 772 Industrial-Service Engineering Technology, Automotive Major,	213
Apprentices.  ART APPRECIATION	210	Evaluation Monograph. VT 007 390 Fundamentals of Electricity and Magnetism. Training Chart Manual.	214
VT 009 306 Applied Design.		Section A. VT 007 391	214
ARTICULATION (PROGRAM) VT 008 456 Economic Education Scope and Sequence Chart, 1969. A Handbook.	237	Storage Batteries. Training Chart Manual. Section B. VT 007 392 Cranking Motors. Training Chart Manual. Section C.	214
AUDIOVISUAL AIDS VT 007 228 ED 029 951 Occupational Communication Competencies: A List of	236	Ignition System. Training Chart Manual. Section D.	<ul><li>214</li><li>215</li></ul>
Audio-Visual Aids. VT 008 577 Audio-Visual Aids Relating to the	221	Section E.	215
Graphic Arts. VT 008 694 Consumer Education Bulletin Board Ideas.	200	Training Chart Manual. Section F. VT 007 396 Heavy Duty Generator Regulators.	215
AUTO MECHANICS VT 006 739	213	Fundamentals of Semiconductors.	215
Engine-Electrical Tune-Up System.		Training Chart Manual. Section J.	



	PAGE		PAGE
VT 007 398 Fundamentals of Delcotron Generators. Training Chart Manual.	215	VT 008 570 Welding, Blueprint Reading for Welders.	221
Section K. VT 007 399 Transistor Regulators. Training Chart Manual. Section L.	216	BOOK LISTS VT 008 094 Discount Retailing.	190
VT 007 400 Double Contact Regulators. Trainin Chart Manual. Section R. VT 008 494	216 19 219	BOOKKEEPERS VT 008 910	186
Automechanics Related Math. Assignment Sheets. VT 008 536	219	Bookkeeper II.  BOOKKEEPING VT 008 910	186
Vocational Automotive Mechanics. A Teacher, s Outline. VT 008 915		Bookkeeper II. BOOKLISTS	,
Charging Ignition and Cranking Systems: Periodic Maantenance and Circuit Checks. VT 009 615	233	VT 009 080  Books and Reference Material for Use in North Dakota Vocational Agriculture Departments.	165
An Introduction to the Automotive Electrical System. VT 009 616	234	BRICKLAYERS VT 008 731	224
Distributor Coil Generator Regulator: Service Tips. VT 009 617	234	Curriculum Guide for Trades and Industries Brick Masonry.	
It's Easy to be an ExpertBatter Man, That Is.  AUTOMOTIVE TECHNOLOGY	Y	BUDGETING VT 009 302 Shady Lane Farm Management and Records Problem.	169
VT 004 772 Industrial-Service Engineering Technology, Automotive Major, Evaluation Monograph.	213	BUILDING MATERIALS VT 007 859 ED 031 558 Lumber and Related Products; A Base	20 <b>6</b>
AVIATION VOCABULARY VT 009 588 Airman's Information Manual. 1969 Special Pilot Training Edition.	233	Syllabus on Wood Technology. VT 009 413 Design and Control of Concrete Mixtures.	232
BANK TELLERS VT 008 911 Bank Teller.	226	BUILDING TRADES VT 009 415 Concrete Technology: Instructor's Guide.	232
BANKING VT 008 911 Bank Teller.	226	BULLETIN BOARDS VT 008 694 Consumer Education Bulletin Board Ideas.	200
BEEF SHOWMANSHIP VT 009 324 Fitting and Showing FFA Beef.	174	BUSINESS ADMINISTRATION VT 008 839 Guide Syllabus for the Training of	185
BIBLIOGRAPHIES VT 008 094 Discount Retailing.	190	Administrative and Commercial Trainees.	
VT 008 778  Teaching Aids for Home Economics; Source List.	200 A	BUSINESS EDUCATION VT 001 577 Business Law for High Schools.	182
VT 009 177 Resource Material for Teaching	166	VT 003 598  Office and Business Practices.  Career Guidance Series.	182
Agricultural Mechanics. VT 009 432 Free Teaching Materials for Adult Vocational Programs.	240	VT 004 028  You and the Computer. A Student's Guide.	182
BLUEPRINTS	202	VT 006 396 Office Machines for High Schools.	182
VT 008 553 Blueprint Reading for Metal Trades	220	VT 006 670  Business Communication.	182



Pl	AGE		PAGE
vr 006 <b>7</b> 45	183	CARDBOARD ILLUSTRATIVE AID TO	
Data Processing I.		COMPUTATION	
vr 007 235	183	VT 009 234	238
Business Information Systems:		An Instructional Manual for	
Course Outline.		CARDIAC: A Cardboard Illustrative	
V1 007 052	183	Aid to Computation.	
IBEA Handbook for Teachers of		ALDOND DE LINETHO	
Office Procedures.	404	CAREER PLANNING	236
<b>VI</b> 007 270	184	VT 006 188 ED 029 946	230
Suggested Curriculum Guide for:		Occupations for You. Part Two.	
Clerical.	400	CACD CHILDING	
41 001 211	184	VT 008 583	191
Suggested Curriculum Guide for:		101 Case Problems in Retail	,,,,
Cooperative Office.	184	Selling.	
<b>41</b> 001 310	104	Sellind.	
Suggested Curriculum Guide for:		CASTRATION	
Vocational Office Procedures.	184	VT 009 338	177
VT 008 130 Connecticut Business Education	104	Beef Cattle, Part I, Castration.	
Handbook.		•	
VT 008 134	185	CATTLE	
Programmed Text on Orientation to		VT 009 318	172
an Office Education Program.		Fitting and Showing FFA Dairy	
VT 008 374	185	Cattle.	
A Training Officer's Guide to		VT 009 324	174
Commercial Apprenticeship.		Fitting and Showing FFA Beef.	470
VT 008 840	185	VT 009 325	174
Recommendations on Commercial and		Pre-Natal Development of the Calf.	175
Clerical Training.		VT 009 328	1/3
VT 008 910	186	Commercial Beef Cattle Projects.	176
Bookkeeper II.	40"	VT 009 335  Beef Carcass Judging and Grading.	170
VT 008 923	186	VT 009 338	177
Cooperative Office Education.	186	Beef Cattle, Part I, Castration.	• • •
VT 008 992	100	peel cattle, rare 1, castral-su	
Developing Economic Concepts		CEMENT INDUSTRY	
through Introduction to Business.	187	VT 009 413	232
VT 009 047 Secretarial Skills and Procedures.	107	Design and Control of Concrete	
Adult Course Outline.		Mixtures	
VT 009 174	187	VT 009 415	232
Typewriting: A Tentative Program of	•	Concrete Technology: Instructor's	
Instruction.		Guide.	
VT 009 191	187		
Business and Office Education		CHARTS	213
Handbook.		VT 006 739	213
VT 009 363	187	Engine-Electrical Tune-Up System. VT 006 740	213
The Training of Accountants.	107	A.E.A. Tune-Up System; 1968 Wirin	
VT 009 364	187	Diagrams. Supplement to the A.E.A	•
Syllabus of Training for		Tune-Up Specification Charts.	-
Accountants.	188	VT 007 390	214
VT 009 365	100	Fundamentals of Electricity and	
The General Training of Clerical		Magnetism. Training Chart Manual.	
Staff. VT 009 498	188	Section A.	
Understanding Financial Statements:		VT 007 391	214
7 Keys to Value.		Storage Batteries. Training Chart	
, 10,10 00 142400		Manual. Section B.	244
BUSINESS LAW		VT 007 392	214
VT 001 577	182	Cranking Motors. Training Chart	
Eusiness Law for High Schools.		Manual. Section C.	214
		VT 007 393	214
CARCASS EVALUATION	4.5.5	Ignition System. Training Chart	
VT 009 173	166	Manual. Section D.	215
Swine Carcass Evaluation.	176	VT 007 394  Generators. Training Chart Manual	
VT 009 335	176	Section E.	-
Beef Carcass Judging and Grading.		vr 007 395	215
		Standard Duty Generator Regulator	:•
		Training Chart Manual. Section F.	

E	PAGE	I	PAGE
VT 007 396  Heavy Duty Generator Regulators.  Training Chart Manual. Section G. VT 007 397	<ul><li>215</li><li>215</li></ul>	VT 008 312 Curriculum Guide for Trade and Industries Tailoring Programs.	218
Fundamentals of Semiconductors. Training Chart Manual. Section J. VT 007 398 Fundamentals of Delcotron Generators. Training Chart Manual. Section K.	215	CLOTHING MAINTENANCE SPECIALISTS VT 008 254 Home Economics Education Guide for Instruction Preparatory to Entering Clothing Service Occupations.	199 ,
VT 007 399 Transistor Regulators. Training Chart Manual. Section L. VT 007 400	<ul><li>216</li><li>216</li></ul>	COLOR PLANNING VT 008 989 Color Dynamics for Marketing and Distribution.	192
Double Contact Regulators. Training Chart Manual. Section R. VT 008 456 Economic Education Scope and Sequence Chart, 1969. A Handbook.	237	COMMUNICATION (THOUGHT TRANSFER) VT 008 021 Communication in Distribution. First-Year Basic Instruction.	190
CHEMICAL PROCESS OPERATOR VT 009 022 A New Craft Is Born; An	227	COMMUNICATION SKILLS VT 006 670 Business Communication.	182
Apprenticeship Program for Chemical Process Operator.  CHEMICAL TECHNICIANS VT 008 414 Guide Syllabuses of Training for Metallurgical and Chemical Technicians.	219	VT 007 228 ED 029 951 Occupational Communication Competencies; A List of Audio-Visual Aids. VT 008 021 Communication in Distribution. First-Year Basic Instruction. VT 009 240	<ul><li>236</li><li>190</li><li>239</li></ul>
CHILD CARE VT 009 172 Homemaking Guide. Section III:	201	Occupational Services Academic Curriculum. English Resource Book, Grade 9.	
Children.  CHILD DEVELOPMENT  VT 009 172  Homemaking Guide. Section III; Children.	201	COMMUNICATIONS VT 008 872 Industrial Arts Curriculum Guide: Industrial Arts, 1968-1969.	209
CLERICAL OCCUPATIONS VT 007 976 Suggested Curriculum Guide for: Clerical.	184	COMPANIONS (OCCUPATION) VT 009 160 Home Health Aide Training Manual. VT 009 175 A Study in Recruiting and Training Home and Institutional Health Aides.	196 196
CLERICAL WORKERS VT 007 777 Training for Office Supervision. VT 009 365 The General Training of Clerical Staff.	183 188	COMPREHENSIVE HIGH SCHOOLS VT 008 794 ED 030 745 Development and Evaluation of a Curriculum of Wage Earning Occupation.	201
CLOTHING VT 005 916 Resource Materials for Family Clothing.	198	COMPUTER PROGRAMS VT 009 234 An Instructional Manual for CARDIAC: A Cardboard Illustrative Aid to Computation.	238
CLOTHING INSTRUCTION VT 005 916 Resource Materials for Family Clothing. VT 008 254 Home Economics Education Guide for Instruction Preparatory to Entering	198 199	COMPUTER SCIENCE VT 009 234 An Instructional Manual for CARDIAC: A Cardboard Illustrative Aid to Computation.	238

Clothing Service Occupations.

	PAGE	PAG	E
COMPUTERS VT 004 028 You and the Computer. A Student's	182	VT 008 473 ED 029 974 20 Instructional Materials for Occupational Home Economics Food Service Area.	0
Guide. VT 009 234 An Instructional Manual for CARDIAC: A Cardboard Illustrative Aid to Computation.	238	VT 008 492 ED 029 975 20  Home Economics Related Occupations  Training Plans.  VT 008 913  Coordinator's Handbook, Cooperative	
CONCEPTUAL SCHEMES VT 007 338 Handbook for the Interns in Agricultural Education. VT 009 072 ED 031 594	163 209	Office Education.  VT 008 923  Cooperative Office Education.  VT 009 565  Supervised Occupational Experience in Agriculture; Plans and Records.	
Developing American Industry Courses for the Secondary School.  CONSTRUCTION INDUSTRY VT 009 413 Design and Control of Concrete	232	COOPERATIVE PROGRAMS VT 008 885 Cooperative-Distributive Education; An Alternate Semester Program.	) 1
Mixtures.  CONSUMER ECONOMICS  VT 008 372  A One Week Teaching Unit on	199	COOPERATIVES VT 009 319 CO-OPS: (Cooperative Organizations Offering Producers Services).	12
Consumer Finance. Teacher's Kit.  CONSUMER EDUCATION VT 002 813	198	CORSAGES VT 009 333 Flowers to Wear.	75
Out on Your Own. VT 008 372 A One Week Teaching Unit on Consumer Finance. Teacher's Kit.	199	Home Economics Education Guide for	99
VT 008 694 Consumer Education Bulletin Board Ideas. VT 008 905	200	Typewriting: A Tentative Program of	87
Consumer Education (Transparency Masters).  COOKS		VI UUU JE I	94
VT 008 467 Short-Term Course for Cooks in Long-Term Care Facilities. Curriculum Guide for Health Occupations.	199	Staff Development: Motivation and Stimulation of Employees, Instructional Outline.  VT 008 527 ED 030 721 22  The "Project ABLE" General Woodworking Curriculum. (Interim	20
COOPERATIVE EDUCATION VT 002 100 The General Related Units for Industrial Cooperative Training; Suggested Study of Topics Needed Every Vocational Student, Teachers	bу	Product).  COURSE OBJECTIVES  VT 008 527 ED 030 721 22  The "Project ABLE" General woodworking Curriculum. (Interim	20
Guide. VT 002 937 Agricultural Business and Service for High School Students of Vocational Agriculture, 1967. VT 006 011	162 s	Product).  COURSE ORGANIZATION  VT 008 734  Power: Prime Mover of Technology.  Teacher's Manual.	08
Distributive EducationWholesaling. A Pilot Program at Hartford Public High School. VT 007 977	184	CRANKING CIRCUIT  VT 008 805  The Cranking Circuit (and How It  Works).	24
Suggested Curriculum Guide for: Cooperative Office.		CRANKING MOTORS	14



ī	PAGE	P	AGE
CREDIT (FINANCE) VT 008 372 A One Week Teaching Unit on	199	VT 004 772 Industrial-Service Engineering Technology, Automotive Major,	213
Consumer Finance. Teacher's Kit.  CULTURALLY DISADVANTAGED		Evaluation Monograph. VT 005 914 Instructor's Guide for Printing 1	204
VT 009 176  Coordinated Vocational-Academic	227	and 2. VT 005 915	204
Education Metal Trades Program. (Basic Metalworking, Welding, Sheet Metal Fabricating, Ornamental	:	Instructor's Guide for Senior High School Woodwork in the Tulsa Public Schools (Tentative).	182
Ironworking) - CULTURE		VT 006 396 Office Machines for High Schools. VT 006 650	205
VT 009 236 World Cultures Resource Book: Grade	239	General Metal Work 1 and 2. Course of Study.	
10.		VT 006 670  Business Communication.	182
CURRICULUM VT 008 456 Economic Education Scope and	237	VT 006 745 Data Processing I. VT 006 765	183 205
Sequence Chart, 1969. A Handbook. VT 008 885	191	Graphic Arts 1 and 2. Course of Study.	203
Cooperative-Distributive Education; An Alternate Semester Program.	}	VT 007 235  Business Information Systems;	183
CURRICULUM DEVELOPMENT VT 008 794 ED 030 745	201	Course Outline. VT 007 820 ED 029 955 Practical Nursing Education. A	194
Development and Evaluation of a Curriculum of Wage Earning Occupation.	201	Guide for Teaching Basic Concepts and Skills in the Use of Drugs.  VT 007 857 ED 031 556	206
VT 008 870 Technology and the Schools.	225	Laminating and Bending; A Base Syllabus on Wood Technology.	
VT 009 072 ED 031 594  Developing American Industry  Courses for the Secondary School.	209	VT 007 858 ED 031 557 Adhesives: A Base Syllabus on Wood Technology.	206
VT 009 076 Reports of Consultants and Advisory		VT 007 859 ED 031 558 Lumber and Related Products: A Base	206 •
Specialists. Volume X-A: Industrial and Practical Arts, Vocational Education, and General Adult Education.	_	Syllabus on Wood Technology.  VT 007 860 ED 031 559  Wood Substitutes: A Base Syllabus on Wood Technology.	207
CURRICULUM EVALUATION		VT 007 861 ED 031 560 Wood Properties and Kinds; A Base	207
VT 008 794 ED 030 745  Development and Evaluation of a  Curriculum of Wage Earning	201	Syllabus on Wood Technology. VT 007 975 Suggested Curriculum Guide for:	183
Occupation.		Secretarial. VT 007 976	184
CURRICULUM GUIDES VT 001 577 Business Law for High Schools.	182	Suggested Curriculum Guide for: Clerical. VT 007 977	184
VT 001 686 Industrial Arts	204	Suggested Curriculum Guide for: Cooperative Office.	404
Electricity-Electronics, Grades 7-12. Course Guide.	198	VT 007 978 Suggested Curriculum Guide for: Vocational Office Procedures.	184
VT 002 813 Out on Your Own. VT 003 533	213	VT 008 042 Basic Curriculum for Vocational	163
Technical Subjects, Courses of Study.		Agriculture in Texas. Production Agriculture.	
VT 004 033 Ornamental Horticulture, A Guide for Providing Instruction for 11th	162	VT 008 079 ED 029 961 Grain, Feed, Seed, and Farm Supply Technology. A Suggested 2-Year Post	163 :
and 12th Grade Vocational Education in Agriculture.	1	High School Curriculum. VT 008 136 Guide for Course of Study for Wolder Combination	216

VT 008 226 ED 030 714 198 An Outline for Basic Family Life Education, Grades 1 Through 12. VT 008 231 237 A Guide to Highway Safety and Driver Education. VT 008 312 218 Curriculum Guide for Trades and Industries Tailoring Programs. VT 008 375 A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse. VT 008 414 Guide Syllabuses of Training for Metallurgical and Chemical  VT 009 174
Education, Grades 1 Through 12.  VT 008 231  A Guide to Highway Safety and Driver Education.  VT 008 312  Curriculum Guide for Trades and Industries Tailoring Programs.  VT 008 375  A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse.  VT 008 414  Guide Syllabuses of Training for Metallurgical and Chemical  Education Curriculum Guide.  VT 009 047  Secretarial Skills and Procedures.  Adult Course Outline.  VT 009 081  A Suggested Guide for Teaching Slow Learners in Industrial Arts in the Public Schools.  VT 009 160  Home Health Aide Training Manual.  VT 009 172  Homemaking Guide. Section III; Children.  VT 009 174  183
VT 008 231  A Guide to Highway Safety and Driver Education.  VT 008 312  Curriculum Guide for Trades and Industries Tailoring Programs.  VT 008 375  A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse.  VT 008 414  Guide Syllabuses of Training for Metallurgical and Chemical  237  VT 009 047  Secretarial Skills and Procedures.  Adult Course Outline.  VT 009 081  A Suggested Guide for Teaching Slow Learners in Industrial Arts in the Public Schools.  VT 009 160  Home Health Aide Training Manual.  VT 009 172  Homemaking Guide. Section III; Children.  VT 009 174  183
A Guide to Highway Safety and Driver Education.  VT 008 312  Curriculum Guide for Trades and Industries Tailoring Programs.  VT 008 375  A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse.  VT 008 414  Guide Syllabuses of Training for Metallurgical and Chemical  Secretarial Skills and Procedures.  Adult Course Outline.  VT 009 081  A Suggested Guide for Teaching Slow Learners in Industrial Arts in the Public Schools.  VT 009 160  Home Health Aide Training Manual.  VT 009 172  Homemaking Guide. Section III; Children.  VT 009 174  183
Driver Education.  VT 008 312  Curriculum Guide for Trades and Industries Tailoring Programs.  VT 008 375  A Curriculum Guide to Public Health VT 009 160  Training for the Indian Licensed Practical Nurse.  VT 008 414  Guide Syllabuses of Training for Metallurgical and Chemical  Adult Course Outline.  VT 009 081  A Suggested Guide for Teaching Slow Learners in Industrial Arts in the Public Schools.  VT 009 160  Home Health Aide Training Manual.  VT 009 172  Homemaking Guide. Section III;  Children.  VT 009 174  187
VT 008 312  Curriculum Guide for Trades and Industries Tailoring Programs.  A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse.  VT 008 414  Guide Syllabuses of Training for Metallurgical and Chemical  218  VT 009 081  A Suggested Guide for Teaching Slow Learners in Industrial Arts in the Public Schools.  VT 009 160  Home Health Aide Training Manual.  VT 009 172  Homemaking Guide. Section III;  Children.  VT 009 174  187
Industries Tailoring Programs.  VT 008 375  A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse.  VT 008 414  Guide Syllabuses of Training for Metallurgical and Chemical  Learners in Industrial Arts in the Public Schools.  VT 009 160 Home Health Aide Training Manual. VT 009 172 Homemaking Guide. Section III; Children. VT 009 174
VT 008 375 A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse.  VT 009 160 Home Health Aide Training Manual. VT 009 172 VT 008 414 Guide Syllabuses of Training for Metallurgical and Chemical  VT 009 174  Public Schools.  VT 009 160 Home Health Aide Training Manual. VT 009 172 Homemaking Guide. Section III; Children. 187
A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse.  VT 009 160 Home Health Aide Training Manual. VT 009 172  VT 008 414  Guide Syllabuses of Training for Metallurgical and Chemical  VT 009 174  VT 009 160 Home Health Aide Training Manual. VT 009 172  Homemaking Guide. Section III; Children.  VT 009 174
Training for the Indian Licensed Practical Nurse.  VT 009 172  VT 008 414  Guide Syllabuses of Training for Metallurgical and Chemical  Home Health Aide Training Manual.  VT 009 172  Homemaking Guide. Section III; Children.  VT 009 174  187
Practical Nurse.  VT 009 172  VT 008 414  Guide Syllabuses of Training for Metallurgical and Chemical  VT 009 172  Homemaking Guide. Section III;  Children.  VT 009 174  187
Guide Syllabuses of Training for Children.  Metallurgical and Chemical VT 009 174 187
Metallurgical and Chemical VT 009 174 187
ind displayed distribution and displayed distribution and displayed distribution and displayed distribution and displayed disp
Technicians. Typewriting: A Tentative Program of
VT 008 415 219 Instruction.
Recommendations for Craft VT 009 175 196
Apprentice Training 1966.  A Study in Recruiting and Training
VT 008 467 199 Home and Institutional Health
Short-Term Course for Cooks in Aides.  Long-Term Care Facilities. VT 009 176 227
Curriculum Guide for Health Coordinated Vocational-Academic
Occupations. Education Metal Trades Program.
VT 008 536 220 (Basic Metalworking, Welding, Sheet
Vocational Automotive Mechanics. A Metal Fabricating, Ornamental
Teacher,s Outline.
VT 008 537 208 VT 009 193 202 Vocational Industrial Drafting. A Guide for Training Homemakers.
Teacher's Outline. VT 009 194 210
VT 008 611 221 Senior High School Industrial Arts.
Proposed Occupational Preparation VT 009 195
Program in Metal Skills. Curriculum Guide for Ornamental
VT 008 613 221 Horticulture.  Machine Trades: Grinding and Heat VT 009 235 238
Treating. Occupational Services Academic
VT 008 623 Curriculum. Mathematics Resource
Metallurgical Technology. A Book, Grade 10.
Suggested 2-Year Post High School VT 009 236 239
Curriculum. World Cultures Resource Book; Grade VT 008 625 222 10.
VT 008 625 222 10. Uniform Fire Science Curriculum. VT 009 238 239
VT 008 734 208 Occupational Services Academic
Power: Prime Mover of Technology. Curriculum, English, Social
Teacher's Manual. Studies, Mathematics, Science,
VT 008 791 ED 030 744 195 Grade 10.  Dental Assistant Training: Standard VT 009 240 239
Dental Assistant Training: Standard VT 009 240 239  Course Outline. Occupational Services Academic
yr 008 839 185 Curriculum. English Resource Book,
Guide Syllabus for the Training of Grade 9.
Administrative and Commercial VT 009 242 239
Trainees. Occupational Services Academic
VT 008 841 225 Curriculum. Mathematics Resource Book, Grade 9.
Boilermaker, Welder and Blacksmith VT 009 249 239
Apprentices. Occupational Services Academic
VT 008 857 225 Curriculum. English, Social
Recommendations for the Training of Studies, Mathematics, Science,
Technicians and Technologists. Grade 9.  VT 008 872 209 VT 009 268 202
VT 008 872 209 VT 009 268 202 Industrial Arts Curriculum Guide: Resource Guide, Housing and Home
Industrial Arts, 1968-1969. Resource surder, nousing and nome furnishings.
VT 008 948 195 VT 009 290 202
Purser Pharmacist Mate Curriculum. In-Betweens: A Curriculum Guide for
A Training Curriculum.  Home Economics Teachers of Students
VT 008 992 186 with Special Learning Needs.
Developing Economic Concepts through Introduction to Business.

ERIC Provided by ERIC

P	AGE	P	AGE
VT 009 300 Exercises for Biological Principles in Agricultural Crops. VT 009 364 Syllabus of Training for	169 187	DENTAL ASSISTANTS VT 008 791 ED 030 744 Dental Assistant Training: Standard Course Outline.	195
Accountants. VT 009 415 Concrete Technology: Instructor's Guide.	232	DESIGN CRAFTS VT 009 306 Applied Design.	210
VT 009 592 Automobile Mechanics: An Outline for Trade and Industrial Programs.	233	DIODES VT 007 397 Fundamentals of Semiconductors. Training Chart Manual. Section J.	215
CURRICULUM PLANNING VT 007 975 Suggested Curriculum Guide for: Secretarial.	183	DISCOUNT RETAILING VT 008 094 Piggoupt Potailing	190
VT 007 976 Suggested Curriculum Guide for: Clerical.	184	Discount Retailing. DISPLAY PANELS VT 008 191	190
	184	Show Card Lettering and Layout.  DISTRIBUTIVE EDUCATION	170
VT 007 978 Suggested Curriculum Guide for: Vocational Office Procedures.	184 186	VT 006 011 Distributive EducationWholesaling. A Pilot Program at Hartford Public High	190
through Introduction to Business.	187	School.  VT 008 021  Communication in Distribution.  First-Year Basic Instruction.	190
Adult Course Outline.	238	VT 008 191 Show Card Lettering and Layout.	190 191
Specialists. Volume X-A: Industrial and Practical Arts, Vocational Education, and General Adult		Basic Organization of Distribution. First-Year Basic Instruction. VT 008 454	191
Education. CUSTODIAN TRAINING			191
Grounds Care: Custodial Training Course.	166		191
Job Analysis, Man Power Allotment and Work Schedules: Custodial	227	Store Security (Transparency Masters). VT 008 885	191
Minor Maintenance: Custodial	229	Cooperative-Distributive Education; An Alternate Semester Program. VT 008 938	192
Training Course.  DATA PROCESSING		Parliamentary Procedures (Transparency Masters). VT 008 944	192
VT 006 745 Data Processing I.	183	Distributive Education Clubs of America (Transparency Masters). VT 008 989	192
DATA PROCESSING OCCUPATIONS VT 006 745 Data Processing I.	183	Color Dynamics for Marketing and Distribution.	4
•	183	Distributive Education Clubs of	192
	167	Double Contact Regulators. Training	216
		Chart Manual. Section R.	

I	PAGE	PA	GE
DRAFTING VT 006 598 Drafting I. Student Problems.	205	Reports of Consultants and Advisory Specialists. Volume X-A: Industrial and Practical Arts, Vocational	38
DRAFTSMEN VT 008 537 Vocational Industrial Drafting. A	208	Education, and General Adult Education.	
Teacher's Outline. VT 009 330 Your Future as a Draftsman.	228	EGG GRADING VT 009 309 Grading Eggs for Quality.	70
DRIVER EDUCATION VT 008 231 A Guide to Highway Safety and	237	ELECTRIC BATTERIES  VT 007 391  Storage Batteries. Training Chart  Manual. Section B.	14
Driver Education. VT 008 319 Oklahoma Curriculum Guide for Driver and Traffic Safety Education.	218	VT 008 807 2 Let's Talk Energizers and Batteries Testing and Servicing.	24
DRUG THERAPY VT 007 820 ED 029 955	194	It's Easy to be an ExpertBattery Man, That Is.	
Practical Nursing Education. A Guide for Teaching Basic Concepts and Skills in the Use of Drugs.		ELECTRIC MOTORS  VT 008 287  Electrical Experiments. Part I:  Electric Motor Control.	217
ECONOMICS VT 008 456 Economic Education Scope and Sequence Chart, 1969. A Handbook.	237	Practical Electronics. Technical	212
VT 008 992 Developing Economic Concepts through Introduction to Business.	186	Electrical Experiments. Part I:	217
VT 009 498 Understanding Financial Statements 7 Keys to Value.	188 ;	Electrical Experiments. Part II:	217
EDUCATIONAL METHODS VT 008 193	236	A-C Across the Line Control.  VT 008 289  Electrical Experiments. Part III:  Basic Electronics.	217
Occupational Instructors Handbook Manpower Development Training.  EDUCATIONAL PHILOSOPHY			223
VT 007 687 ED 029 953 Principles and Philosophy of Vocational Education.	236	Boards Concerned with Distribution.  VT 009 366 2  The Training of Mates as Linesmen  (Steel Tower Lines).	229
VT 006 430 The New Mexico State Planning Guid for Industrial Arts.	204 e	Monitoring of On-Job Training of Craft Apprentices in Electricity Boards Concerned with Generation.	229
EDUCATIONAL PRINCIPLES VT 007 687 ED 029 953 Principles and Philosophy of Vocational Education.	236	The Training of Operatives in Electricity Boards Concerned with Distribution.  VT 009 369	229
EDUCATIONAL PROGRAMS VT 008 374 A Training Officer's Guide to	185	The Training of Training Officers.  VT 009 371  The Training of Jointers as  Jointers (Extra High Tension).	<b>23</b> 0
Commercial Apprenticeship.  VT 008 617  Recommendations for Training.	222	VT 009 372 The Training of Mates as Jointers.	2 <b>30</b> 2 <b>3</b> 0
Operatives.		The Training of Mates as Linesmen (Wood-Pole).	231



1	PAGE		PAGE
VT 009 376 Craft Apprentice Training Programmes for Electricians, Electrical Fitters, and Meter	231	ELECTRICIANS VT 008 332 Teaching Aids for Electrical Experiments. Grade 11. Lesson Plan	219
Mechanicians in Electricity Boards Concerned with Distribution. VT 009 377 Craft Apprentice Training Programmes for Mechanical Fitters,	231	ELECTRICITY VT 001 686 Industrial Arts Electricity-Electronics, Grades	204
Electrical Fitters, and Instrument Mechanics in Electricity Boards Concerned with Generation. VT 009 378	231	7-12. Course Guide. VT 007 390  Fundamentals of Electricity and Magnetism. Training Chart Manual.	214
The Training of Jointers and Linesmen's Mates in Electricity Boards Concerned with Distribution. VT 009 379	. 232	Section A. VT 008 287 Electrical Experiments. Part I: Electric Motor Control.	217
The Training of Student Engineering Apprentices.		VT 008 288  Electrical Experiments. Part II: A-C Across the Line Control.	217
ELECTRICAL SYSTEMS VT 007 391 Storage Batteries. Training Chart	214	VT 008 289 Electrical Experiments. Part III: Basic Electronics.	217
Manual. Section B. VT 007 392 Cranking Motors. Training Chart	214	VT 008 332 Teaching Aids for Electrical Experiments. Grade 11. Lesson Plan.	
Manual. Section C. VT 007 393 Ignition System. Training Chart Manual. Section D.	214	VT 009 390 Electrical Wiring.	178
VT 007 394  Generators. Training Chart Manual. Section E.	215	FLECTRONIC CONTROL VT 008 288 Electrical Experiments. Part II: A-C Across the Line Control.	217
VT 007 395 Standard Duty Generator Regulator. Training Chart Manual. Section F. VT 007 396	215 215	VT 008 808 Regulation and the Charging Circuit.	224
Heavy Duty Generator Regulators. Training Chart Manual. Section G. VT 007 398 Fundamentals of Delcotron	215	ELECTRONIC EQUIPMENT VT 009 344 Handbook of Noise Measurement.	228
Generators. Training Chart Manual. Section K. VT 007 400	216	ELECTRONIC MECHANICS VT 008 194 Guide for Course of Study for	217
Double Contact Regulators. Training Chart Manual. Section R. VT 008 805		Electronic Mechanic (Any Ind.) (Entry).	
Introducing the Delcotron Generator	224	ELECTRONIC TECHNICIANS VT 009 343 Handbook of Coaxial Microwave Measurements.	228
and the Charging Circuit.  VT 008 809  20,000 Volts under the Hood: The  Ignition Circuit and How It Works.	225	ELECTRONICS VT 001 686 Industrial Arts	204
VT 008 915 Charging Ignition and Cranking Systems: Periodic Maintenance and Circuit Checks.	226	Electricity-Electronics, Grades 7-12 Course Guide. VT 001 61 ED 026 455	212
	233	Practical Electronics. Technical Instruction Manual. VT 008 289 Electrical Experiments. Part III:	217
• •	234	Basic Electronics.	219
		•	228



	PAGE		PAGE
VT 009 343 Handbook of Coaxial Microwave Measurements.	226	EXHIBITS VT 008 191 Show Card Lettering and Layout.	190
EMBRYOLOGY VT 009 329 Embryo Development of the Chick.	175	VT 009 313  Beginning Techniques in Flower Arranging. VT 009 318	171 172
ENGINEERING VT 009 379 The Training of Student Engineerin Apprentices.	<b>232</b> q	Fitting and Showing FFA Dairy Cattle. VT 009 321 Fat Lamb Project Problems. VT 009 323	173 174
ENGINES VT 001 950 ED 023 786 Auto Mechanics: Methodology. Technical Instruction Manual.	212	Exhibiting Plant Products at the Fair. VT 009 324 Fitting and Showing FFA Beef.	174
ENGLISH VT 009 240 Occupational Services Academic	239	FAIRS VT 009 318 Fitting and Showing FFA Dairy Cattle.	172
Curriculum. English Resource Book, Grade 9.  ENGLISH CURRICULUM VT 009 238	239	VT 009 321 Fat Lamb Project Problems. VT 009 323 Exhibiting Plant Products at the Fair.	173 174
Occupational Services Academic Curriculum, English, Social Studies, Mathematics, Science, Grade 10.		FAMILY LIFE EDUCATION VT 008 226 ED 030 714 An Outline for Basic Family Life	198
VT 009 249 Occupational Services Academic Curriculum. English, Social Studies, Mathematics, Science, Grade 9.	239	Education, Grades 1 Through 12. VT 008 905 Consumer Education (Transparency Masters).	201
ENTOMOLOGY VT 009 296 Insects Identification Manual.	167	FARM ACCOUNTS VT 008 646 Farm Business Management Report, 1968.	164
ENVIRONMENTAL TECHNICIANS VT 008 486 ED 031 565 Water and Wastewater Technology; A	195	VT 009 299  DuMore Farm Records Problem.  VT 009 302  Shady Lane Farm Management and	168 169
Suggested 2-Year Post High School Curriculum.  EQUIPMENT VT 009 301	169	Records Problem.  FARM MANAGEMENT  VT 008 646  Farm Business Management Report,	164
Tool Identification Manual.  EQUIPMENT MAINTENANCE	400	1968. VT 009 287 Supervision in Agriculture: A Unit	167
VT 009 297 Small Gasoline Engines, (Ornamental Horticulture).	168 1	of Instruction. VT 009 299 DuMore Farm Records Problem. VT 009 302	168 169
EQUIPMENT UTILIZATION VT 009 317 Use of the Level: Reading the Rod. VT 009 341 Use of the Level: Setting Up the Instrument.	172 177	Shady Lane Farm Management and Records Problem. VT 009 328 Commercial Beef Cattle Projects. VT 009 337 Poultry Brooding Management.	175 176
EVALUATION VT 009 294 Judging Deciduous Fruit Trees. VT 009 315 Judging Vegetable Crops.	167 172	FARM MECHANICS (OCCUPATION) VT 007 848 Hydraulic Systems for the Farm. Resource Unit and Skill Text. VT 009 567	163 179
VT 009 335  Beef Carcass Judging and Grading.	176	Plows and Plowing.	1/3



I	PAGE	P	AGE
FARM STRUCTURES		VT 009 312	171
VT 009 390	178	Vegetables.	
Electrical Wiring.		VT 009 313 Beginning Techniques in Flower	171
FARMERS	163	Arranging. VT 009 317	172
VT 008 042 Basic Curriculum for Vocational	103	Use of the Level: Reading the Rod.	V . (m)
Agriculture in Texas. Production		VT 009 318	172
Agriculture.		Fitting and Showing FFA Dairy	
VT 009 319	172	Cattle.	470
CO-OPS; (Cooperative Organizations		VT 009 319	172
Offering Producers Services).	180	CO-OPS: (Cooperative Organizations Offering Producers Services).	
VT 009 569 Appraising Market Hogs for Carcass	100	VT 009 320	173
Merit.		Fundamentals of Equitation.	. ,
		VT 009 321	173
FEDERAL AVIATION ADMINISTRATION		Fat Lamb Project Problems.	470
VT 009 588	233	VT 009 322	173
Airman's Information Manual. 1969		Evolution in Marketing Farm Products.	
Special Pilot Training Edition.		VT 009 323	174
FEDERAL LEGISLATION		Exhibiting Plant Products at the	• • •
VT 008 037	236	Fair.	
Vocational Education, A		VT 009 324	174
Dramatization.		Fitting and Showing FFA Beef.	174
THUR D. ADADA		VT 009 325 Pre-Natal Development of the Calf.	174
FIELD CROPS VT 009 315	172	VT 009 326	174
Judging Vegetable Crops.	T 7 A4	How to Do a Poultry Autopsy.	
		VT 009 327	175
FILMS		Catching and Handling Poultry-	175
VT 009 077	165	VT 009 328 Commercial Beef Cattle Projects.	173
Suggested Films for North Dakota Vocational Agriculture Departments	_	VT 009 329	175
Andreas Adriante population	•	Embryo Development of the Chick.	
FILMSTRIPS		VT 009 330	228
VT 008 805	224	Your Future as a Draftsman.	220
The Cranking Circuit (and How It		VT 009 331 Basic Electronic Components:	228
Works) VT 008 806	224	Resistors.	
Introducing the Delcotron Generato		VT 009 333	175
and the Charging Circuit.		Flowers to Wear.	
VT 008 807	224	VT 009 334	176
Let's Talk Energizers and Batterie	S	Poultry Selection and Judging.	176
Testing and Servicing. VT 008 808	224	VT 009 335  Beef Carcass Judging and Grading.	170
Regulation and the Charging	224	VT 009 336	176
Circuit		Plant Identification: Annuals,	
VT 008 809	225	Perennials, and House Plants.	47/
20,000 Volts under the Hood: The		VT 009 337	176
Ignition Circuit and How It Works. VT 009 173	166	Poultry Brooding Management. VT 009 338	177
Swine Carcass Evaluation.	100	Beef Cattle, Part I, Castration.	* * *
VT 009 306	210	VT 009 339	177
Applied Design.		Introduction to Irrigation.	477
VT 009 307	170	VT 009 340	177
The Brood Sow and Litter. VT 009 308	170	The Food Processing Industry. VT 009 341	177
Anatomy of the Fowl.	, , <del>,</del>	Use of the Level: Setting Up the	
VT 009 309	170	Instrument.	
Grading Eggs for Quality.	4 4	VT 009 342	ี 177
VT 009 310	170	The Poultry Industry, A Career with a Future.	п
Oxy-Acetylene Welding: Setting up the Equipment and Lighting the		a ruture. VT 009 350	178
Torch.		Pocket Gophers.	. , -
VT 009 311	171	VT 009 351	178
Oxy-Acetylene Welding: Flat		Ground Squirrel Control.	
Position Welds.			



i	PAGE	•	PAGE
FINANCIAL SERVICES		VT 008 374	185
VT 009 498	188	A Training Officer's Guide to	
Understanding Financial Statements		Commercial Apprenticeship.	
7 Keys to Value.		VT 008 555	237
MTDD DTGUMDDC		Design of Instruction. VT 008 569	221
FIRE FIGHTERS VT 008 624	222	Training Recommendations.	241
Suggested Physical Agility Program.		Operatives.	
VT 008 625	222	VT 008 617	222
Uniform Fire Science Curriculum.		Recommendations for Training.	
		Operatives.	000
FIRE SCIENCE EDUCATION	000	VT 008 633	223
VT 008 625 Uniform Fire Science Curriculum.	222	Monitoring of On-Job Training of Craft Apprentices in Electricity	
outloum tile science conficultum.		Boards Concerned with Distribution.	-
FLIGHT TRAINING		VT 008 880	237
VT 009 582	233	Books for Training Officers.	
Flight Maneuvers Manual for		VT 009 362	229
Instructors and Students.		On Management Training and	
VT 009 588	233	Development.	187
Airman's Information Manual. 1969		VT 009 363 The Training of Accountants.	107
Special Pilot Training Edition.		VT 009 364	187
FLORICULTURE		Syllabus of Training for	107
VT 009 313	171	Accountants.	
Beginning Techniques in Flower		VT 009 365	188
Arranging.		The General Training of Clerical	
VT 009 333	175	Staff.	222
Flowers to Wear.	476	VT 009 366	229
VT 009 336 Plant Identification: Annuals,	176	The Training of Mates as Linesmen (Steel Tower Lines).	
Perennials, and House Plants.		VT 009 367	229
reaching and house realities		Monitoring of On-Job Training of	
FLOWER ARRANGING		Craft Apprentices in Electricity	
VT 009 313	171	Boards Concerned with Generation.	
Beginning Techniques in Flower		VT 009 368	229
Arranging.		The Training of Operatives in	
FOOD AND DRUG INSPECTORS		Electricity Boards Concerned with Distribution.	
VI 009 309	170	VT 009 369	230
Grading Eggs for Quality.	110	The Training of Training Officers.	
		VT 009 370	230
FOOD PROCESSING OCCUPATIONS		On Industrial Staff Traineeships.	
VT 009 340	177	VT_009_371	230
The Food Processing Industry.	100	The Training of Jointers as	
VT 009 569 Appraising Market Hogs for Carcass	180	Jointers (Extra High Tension). VT 009 372	230
Merit.		The Training of Mates as Jointers.	200
		VT 009 373	230
FOOD SERVICE		The Training of Mates as Linesmen	
VT 008 473 ED 029 974	200	(Wood-Pole).	0.7.4
Instructional Materials for		VT 009 374	231
Occupational Home Economics Food Service Area.		The Training of Craft Apprentices.  VT 009 375	231
Service Alad.		The Training of Instructors.	200
FOOD SERVICE WORKERS		VT 009 376	231
VT 008 467	199	Craft Apprentice Training	
Short-Term Course for Cooks in		Programmes for Electricians,	
Long-Term Care Facilities.		Electrical Fitters, and Meter	
Curriculum Guide for Health		Mechanicians in Electricity Boards	
Occupations. VT 008 473 ED 029 974	200	Concerned with Distribution. VT 009 377	231
Instructional Materials for	200	Craft Apprentice Training	2.5 (
Occupational Home Economics Food		Programmes for Mechanical Fitters,	
Service Area.		Electrical Fitters, and Instrument	
		Mechanics in Electricity Boards	
FOREIGN COUNTRIES	103	Concerned with Generation.	
VT 007 777	183		



	PAGE		PAGE
VT 009 378 The Training of Jointers and Linesmen's Mates in Electricity	231	HEALTH EDUCATION VT 008 226 ED 030 714	198
Boards Concerned with Distribution VT 009 379 The Training of Student Engineering	232	An Outline for Basic Family Life Education, Grades 1 Through 12. VT 008 905	201
Apprentices. VT 009 380	232	Consumer Education (Transparency Masters).	
The Training of Supervisors.		HEALTH OCCUPATIONS EDUCATION VT 007 820 ED 029 955	194
FUR GRADING VT 008 949 How to Grade Furs.	164	Practical Nursing Education. A Guide for Teaching Basic Concepts and Skills in the Use of Drugs.	• • •
FUTURE HOMEMAKERS OF AMERICA VT 008 904	20.1	VT 007 956  Manual for the Nurse's Aide.	194
Future Momemakers of America (Transparency Masters).	201	VT 008 375 A Curriculum Guiãe to Public Healt Training for the Indian Licensed Practical Nurse.	194 h
GENERATOR REGULATORS VT 007 395	215	VT 008 467 Short-Term Course for Cooks in	199
Standard Duty Generator Regulator. Training Chart Manual. Section F. VT 007 396	215	Long-Term Care Facilities. Curriculum Guide for Health Occupations.	
Heavy Duty Generator Regulators. Training Chart Manual. Section G.		VT 008 791 ED 030 744  Dental Assistant Training; Standar Course Outline.	195 d
GENERATORS VT 007 394 Generators. Training Chart Manual.	215	VT 008 931 ED 031 581  Manual for Training Leprosy Rehabilitation Workers.	195
Section E. VT 007 398 Fundamentals of Delcotron Generators. Training Chart Manual.	215	VT 008 948  Purser Pharmacist Mate Curriculum.  A Training Curriculum.  VT 009 160	195 196
Section K.		Home Health Aide Training Manual. VT 009 175	196
GRADE 10 VT 008 527 ED 030 721 The "Project ABLE" General Woodworking Curriculum. (Interim Product).	220	A Study in Recruiting and Training Home and Institutional Health Aides.	
GRAPHIC ARTS		HERBICIDES VT 009 566	179
VT 005 914 Instructor's Guide for Printing 1	204	Weed Control, Cultural and Chemical.	
and 2. VT 006 765 Graphic Arts 1 and 2. Course of Study.	205	HIGH SCHOOL CURRICULUM  VT 009 072 ED 031 594  Developing American Industry  Courses for the Secondary School.	209
VT 008 577 Audio-Visual Aids Relating to the Graphic Arts.	221	HIGH SCHOOLS VT 008 245	191
VT 009 284 Communications Via Offset Lithography.	227	Basic Organization of Distribution. First-Year Basic Instruction.	
GROUND SQUIRREL CONTROL VT 009 351 Ground Squirrel Control.	178	HISTORICAL REVIEWS VT 008 037 Vocational Education, A Dramatization.	236
GROUNDS KEEPERS VT 009 282	166	HOME ECONOMICS EDUCATION VT 002 813	198
Grounds Care: Custodial Training Course.		Out on Your Own. VT 005 237	198
HAND TOOLS VT 009 301 Tool Identification Manual.	169	Home Economics Evaluation Services in the Junior High School.  VT 005 916  Resource Materials for Family Clothing.	198



	PAGE	PAG	æ
VT 008 226 ED 030 714  An Outline for Basic Family Life Education, Grades 1 Through 12.	198	HOUSING VT 009 268 Resource Guide, Housing and Home	)2
VT 008 276 Evaluation Guide for Homemaking	199	Furnishings. HYDRAULICS	
Education. VT 008 372 A One Week Teaching Unit on Consumer Finance. Teacher's Kit.	199	VT 007 848 16  Hydraulic Systems for the Farm.  Resource Unit and Skill Text.	3
VT 008 467 Short-Term Course for Cooks in Long-Term Care Facilities. Curriculum Guide for Health	199	IGNITION CIRCUIT VT 008 809 22 20,000 Volts under the Hood: The	25
Occupations.  VT 008 694  Consumer Education Bulletin Board	200	Ignition Circuit and How It Works. ILLUSTRATIONS	
Ideas. VT 008 778 Teaching Aids for Home Economics:	200	VT 008 805 The Cranking Circuit (and How It Works).	24
Source List. VT 008 904	201	VT 008 806 22 Introducing the Delcotron Generator and the Charging Circuit.	24
Future Homemakers of America (Transparency Masters).  VT 008 905	201	VT 008 807 22  Let's Talk Energizers and Batteries  Testing and Servicing.	24
Consumer Education (Transparency Masters). VT 009 172	201	VT 008 808 22  Regulation and the Charging Circuit.	24
Homemaking Guide. Section III; Children. VT 009 193 Guide for Training Homemakers.	202	VT 008 809 22 20,000 Volts under the Hood: The Ignition Circuit and How It Works.	25
VT 009 268 Resource Guide, Housing and Home Furnishings.	202	INDIVIDUAL INSTRUCTION VT 008 613 22	21
VT 009 290 In-Betweens: A Curriculum Guide for Home Economics Teachers of Student with Special Learning Needs.	202 or ts	Machine Trades: Grinding and Heat Treating.  INDUSTRIAL ARTS	0.4
HOME ECONOMICS TEACHERS VT 002 481 Quality Through Growth, A Suggeste	198 eđ	VT 001 686 20 Industrial Arts Electricity-Electronics, Grades 7-12. Course Guide.	)4
Guide in Teacher Education for Ho Economics Coordinators and Teachers.		VT 005 915 20 Instructor's Guide for Senior High School Woodwork in the Tulsa Public	0 4
HOME FURNISHINGS VT 009 268	202	Schools (Tentative).  VT 006 430  The New Mexico State Planning Guide  for Industrial Arts.	<b>34</b>
Resource Guide, Housing and Home Furnishings.		VT 006 462 20 Industrial Arts Teachers Handbook	04 05
HOMEMAKING SKILLS VT 009 193 Guide for Training Homemakers.	202	Drafting I. Student Problems.  VT 006 650 20  General Metal Work 1 and 2. Course	05
HORSES VT 009 320 Fundamentals of Equitation.	173	of Study.  VT 006 765  Graphic Arts 1 and 2. Course of Study.	05.
HORTICULTURE VT 009 294 Judging Deciduous Fruit Trees.	167		05
VT 009 312 Vegetables.	171	VT 007 853 ED 031 555 20 Woodworking Technology.	06 06
VT 009 315 Judging Vegetable Crops.	172	Laminating and Bending: A Base Syllabus on Wood Technology.	- <del>-</del>



1	PAGE	PI	AGE
VT 007 858 ED 031 557 Adhesives: A Base Syllabus on Wood	206	Communications Via Offset	227
Technology. VT 007 859 ED 031 558 Lumber and Related Products: A Base Syllabus on Wood Technology. VT 007 860 ED 031 559	206 e 20 <b>7</b>	Lithography. VT 009 331  Basic Electronic Components: Resistors.	228
Wood Substitutes: A Base Syllabus on Wood Technology. VT 007 861 ED 031 560 Wood Properties and Kinds: A Base Syllabus on Wood Technology.	207	INDUSTRIAL PERSONNEL VT 008 839 Guide Syllabus for the Training of Administrative and Commercial Trainees.	185
VT 008 268 Safety Education in the School Shop. VT 008 269 ED 026 273	207	INDUSTRIAL TECHNOLOGY VT 008 870 Technology and the Schools.	225
Space Resources for the High School. Industrial Arts Resource Units.	20 7	INDUSTRIAL TRAINING	237
VT 008 270 Handbook for Industrial Arts Education.	207	Design of Instruction. INDUSTRY	
VT 008 328 Suggested Related Information for the Metal Area. Industrial Arts Comprehensive General Shop Course.	208	VT 009 281 Interpreting Industry Through Line Production.	210
VT 008 733 Power: Prime Mover of Technology. Laboratory Manual. VT 008 734 Power: Prime Mover of Technology.	208	INFORMATION SOURCES VT 007 699 ED 027 400 1 A Description and Source Listing of Professional Information in Agricultural Education, 1964-65,	163
Teacher's Manual. VT 008 872 Industrial Arts Curriculum Guide:	209	1965-66. INFORMATION SYSTEMS	
Industrial Arts, 1968-1969. VT 008 993 Woodworking: Vocational-Industrial Education Curriculum Guide.	209		183
VT 009 072 ED 031 594 Developing American Industry Courses for the Secondary School. VT 009 194	209	INPLANT PROGRAMS VT 009 345 Minor Maintenance: Custodial Training Course.	229
Senior High School Industrial Arts. VT 009 281 Interpreting Industry Through Line Production. VT 009 306	210	Staff Development: Motivation and	194
Applied Design.	210	Stimulation of Employees, Instructional Outline.	
INDUSTRIAL ARTS TEACHERS VT 008 270 Handbook for Industrial Arts Education.	207	INSERVICE EDUCATION VT 009 370 On Industrial Staff Traineeships.	230
VT 008 328 Suggested Related Information for the Metal Area. Industrial Arts Comprehensive General Shop Course.	208	INSERVICE TEACHER EDUCATION VT 002 481 Quality Through Growth, A Suggested Guide in Teacher Education for Home Economics Coordinators and	98
INDUSTRIAL EDUCATION VT 005 914 Instructor's Guide for Printing 1	204	Teachers. INSTRUCTIONAL AIDS	
and 2. VT 008 870 Technology and the Schools.	225	VT 002 215 1 Ornamental Horticulture Teaching	62
VT 009 081  A Suggested Guide for Teaching Slow Learners in Industrial Arts in the Public Schools-	209 '	Materials. VT 009 077 Suggested Films for North Dakota Vocational Agriculture Departments.	<b>6</b> 5



	PAGE		PAGE
VT 009 234	238	IRRIGATION	
An Instructional Manual for CARDIAC: A Cardboard Illustrative		VT 009 339 Introduction to Irrigation.	177
Aid to Computation.	0 11 0	·	
VT 009 432 Free Teaching Materials for Adult	240	JOB SKILLS VT 007 956	194
Vocational Programs.		Manual for the Nurse's Aide.	
INSTRUCTIONAL MATERIALS		VT 008 648  Job Corps Training Standard for	223
VT 002 481	198	Painter.	
Quality Through Growth, A Suggeste Guide in Teacher Education for Hom		VT 009 081 A Suggested Guide for Teaching Sl	20 <b>9</b>
Economics Coordinators and	•	Learners in Industrial Arts in the	
Teachers. VT 002 693	162	Public Schools.	
Teacher's Manual on How to Use	102	JUNIOR HIGH SCHOOLS	
Ornamental Horticulture Teaching Materials.		VT 009 281 Interpreting Industry Through Line	210
VT 007 699 ED 027 400	163	Production.	e
A Description and Source Listing o Professional Information in	f		
Agricultural Education, 1964-65,		LABORATORY EQUIPMENT VT 009 071	164
1965-66.	404	Some Vo-Aq Classroom and Laborator	r y
VT 008 583 101 Case Problems in Retail	191	Instructional Aids. VT 009 079	165
Selling.	205	Suggestions for Equipping the Far	
VT 008 870 Technology and the Schools.	225	Mechanics Shop.	
VT 008 880	237	LABORATORY EXPERIMENTS	
Books for Training Officers.  VT 009 055	238	VT 008 289 Electrical Experiments. Part III:	217
Curriculum Materials. Annotated		Basic Electronics.	
Listing of Materials Available fro Public Education Agencies.	m	VT 008 402 Experiments for the Student	219
VT 009 071	164	Laboratory.	
Some Vo-Aq Classroom and Laborator Instructional Aids.	y	VT 008 733  Power: Prime Mover of Technology.	208
VT 009 177	166	Laboratory Manual.	
Resource Material for Teaching Agricultural Mechanics.		VT 009 300 Exercises for Biological Principle	169
VT 009 300	169	in Agricultural Crops.	75
Exercises for Biological Principle in Agricultural Crops.	s	VT 009 303 Experiments in Soil Science.	169
VT 009 301	169	Experiments in Soil Science.	
Tool Identification Manual.  VT 009 432	240	LABORATORY MANUALS	200
Free Teaching Materials for Adult	240	VT 008 733 Power: Prime Mover of Technology.	208
Vocational Programs.	222	Laboratory Manual.	460
VT 009 582 Flight Maneuvers Manual for	233	VT 009 297 Small Gasoline Engines, (Ornamenta	168
Instructors and Students.	0 11 0	Horticulture).	
VT 009 856 Microfiche Collection of	240	VT 009 303 Experiments in Soil Science.	169
Clearinghouse Documents Reported i	n		
Abstracts of Instructional Materials in Vocational and		LAND JUDGING VT 009 298	168
Technical Education (AIM), Fall		Soils Manual for Land Judging.	
1969. VT 009 857	240	LAND USE	
Abstracts of Instructional	240	VT 009 298	168
Materials in Vocational and Technical Education (AIM), Fall		Soils Manual for Land Judging.	
1969-		LANDSCAPING	
INVESTMENT		VT 009 568 Landscaping the Home Grounds.	179
VT 009 498	188		
Understanding Financial Statements: 7 Keys to Value.	•	LAW ENFORCEMENT VT 007 984	216
- ACTAL CO VALUES		Tear Gas Manual.	210

LAW INSTRUCTION MANAGEMENT VT 001 577 182 VT 009 314 ED 032 428	
VT 001 577 182 VT 009 314 ED 032 428	
Business Law for High Schools. Developing a High School Progr	171 cam in
Ornamental Horticulture. Volumental Horticulture.	
VT 008 904 201	
Future Homemakers of America MANAGEMENT EDUCATION	0.20
(Transparency Masters). VT 009 362 VT 008 938 192 On Management Training and	2 <b>29</b>
Parliamentary Procedures Development.	
(Transparency Masters).	
VT 008 944 192 MANAGERIAL OCCUPATIONS	
Distributive Education Clubs of VT 009 362  America (Transparency Masters). On Management Training and	229
Development.	
LEARNING ACTIVITIES	
VT 008 492 ED 029 975 200 MANPOWER DEVELOPMENT Home Economics Related Occupations VT 008 193	236
Training Plans. Occupational Instructors Handle Manpower Development Training.	book
LEFLORE COUNTY MISSISSIPPI SCHOOL	
DISTRICT MANPOWER DEVELOPMENT AND TRAINING	NG ACT
VT 009 076 238 PROGRAMS Reports of Consultants and Advisory VT 008 136	2 <b>16</b>
Specialists. Volume X-A: Industrial Guide for Course of Study for	2.0
and Practical Arts, Vocational Welder Combination.	
Education, and General Adult VT 008 193	236
Education. Occupational Instructors Hand's Manpower Development Training.	
LEPROSY REHABILITATION	•
VT 008 931 ED 031 581 195 MANUALS	
Manual for Training Leprosy VT 007 338	163
Rehabilitation Workers. Handbook for the Interns in Agricultural Education.	
LESSON PLANS	
VT 005 915 204 MANUFACTURING Instructor's Guide for Senior High VT 008 872	209
School Woodwork in the Tulsa Public Industrial Arts Curriculum Gu:	_
Schools (Tentative). Industrial Arts, 1968-1969.	
VT 006 670 182	
Business Communication.  VT 007 844 ED 031 554  205 VT 007 844 ED 031 554	205
Units for the Laboratory of Units for the Laboratory of	200
Industries. Industries.	
VT 008 332 219	
Teaching Aids for Electrical MARKETING Experiments. Grade 11. Lesson Plan. VT 006 011	190
Distributive	, , ,
LIVESTOCK EducationWholesaling. A Pile	
VT 009 324 174 Program at Hartford Public Hickory School.	j n
Fitting and Showing FFA Beef. School.  VT 008 021	190
LOW ABILITY STUDENTS Communication in Distribution.	•
VT 009 081 209 First-Year Basic Instruction.	100
A Suggested Guide for Teaching Slow VT 008 094  Learners in Industrial Arts in the Discount Retailing.	190
Public Schools. VT 008 245	191
VT 009 290 202 Basic Organization of Distribu	ition.
In-Betweens: A Curriculum Guide for First-Year Basic Instruction.	473
Home Economics Teachers of Students VT 009 322 with Special Learning Needs. Evolution in Marketing Farm	173
with Special Learning Needs. Evolution in Marketing rain Products.	
MACHINISTS	
VT 008 535 220 MASONRY Precision Measurement. VT 008 731	224
Precision Measurement. VT 008 731 VT 008 613 221 Curriculum Guide for Trades as	<del></del>
Machine Trades: Grinding and Heat Industries Brick Masonry. Treating.	



I	PAGE	P	PAGE
MASS PRODUCTION VT 009 281 Interpreting Industry Through Line Production.	210	Recommendations for the Training of Boilermaker, Welder and Blacksmith Apprentices.  VT 009 176	225
MATHEMATICAL APPLICATIONS VT 009 235 Occupational Services Academic Curriculum. Mathematics Resource Book, Grade 10.	238	Coordinated Vocational-Academic Education Metal Trades Program. (Basic Metalworking, Welding, Sheet Metal Fabricating, Ornamental Ironworking).	:
VT 009 242 Occupational Services Academic Curriculum. Mathematics Resource Book, Grade 9.	239	METALLURGICAL TECHNICIANS VT 008 414 Guide Syllabuses of Training for Metallurgical and Chemical	219
MATHEMATICS CURRICULUM VT 009 238 Occupational Services Academic Curriculum, English, Social Studies, Mathematics, Science, Grade 10.	239	Technicians.  VT 008 623  Metallurgical Technology. A  Suggested 2-Year Post High School  Curriculum.	222
VT 009 249 Occupational Services Academic Curriculum. English, Social Studies, Mathematics, Science, Grade 9.	239	METALLURGY VT 008 291 Shop Theory for Machine Trades. Metallurgy of Iron and Steel. Sessions 1-12. VT 008 623	218
MEASUREMENT VT 008 535 Precision Measurement.	220	Metallurgical Technology. A Suggested 2-Year Post High School Curriculum.	
MEASUREMENT INSTRUMENTS VT 009 344 Handbook of Noise Measurement. MEASUREMENT TECHNIQUES	228	METALS VT 006 650 General Metal Work 1 and 2. Course of Study.	205
VT 008 535 Precision Measurement.	220	MONEY MANAGEMENT VT 002 813 Out on Your Own.	198
MEAT VT 009 173 Swine Carcass Evaluation.	166	VT 008 372 A One Week Teaching Unit on Consumer Finance. Teacher's Kit.	199
MEDICAL TREATMENT VT 008 948 Purser Pharmacist Mate Curriculum. A Training Curriculum.	195	NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE VT 007 844 ED 031 554 Units for the Laboratory of Industries. VT 007 853 ED 031 555	205 206
MERCHANDISING VT 008 989 Color Dynamics for Marketing and Distribution.	192	Woodworking Technology. VT 007 857 ED 031 556 Laminating and Bending; A Base Syllabus on Wood Technology.	206
METAL WORKING OCCUPATIONS VT 006 650 General Metal Work 1 and 2. Course	205	VT 007 858 ED 031 557 Adhesives: A Base Syllabus on Wood Technology.	206
of Study. VT 008 291 Shop Theory for Machine Trades. Metallurgy of Iron and Steel.	218	VT 007 859 ED 031 558  Lumber and Related Products: A Base Syllabus on Wood Technology.  VT 007 860 ED 031 559	206 e 207
Sessions 1-12.  VT 008 553  Blueprint Reading for Metal Trades  VT 008 611  Proposed Occupational Preparation  Program in Metal Skills.	220	Wood Substitutes: A Base Syllabus on Wood Technology. VT 007 861 ED 031 560 Wood Properties and Kinds: A Base Syllabus on Wood Technology.	207
Frodram ru noomr nurarne		NOISE MEASUREMENT VT 009 344 Handbook of Noise Measurement.	228



P	AGE	ν	AGE
NURSERIES (HORTICULTURE)		OCCUPATIONAL INFORMATION	
VT 009 293	167		213
A Manual on Nursery Practices. VT 009 314 ED 032 428	171	Careers Related to Industrial Education.	
Developing a High School Program in			236
Ornamental Horticulture. Volume I,	•	Occupations for You. Part Two.	
Nursery Management.			228
		Your Future as a Draftsman.	
NURSERY WORKERS (HORTICULTURE)	167	VT 009 340	177
VT 009 293 A Manual on Nursery Practices.	107	The Food Processing Industry. VT 009 342	177
a handar on warsery fractices.		The Poultry Industry, A Career with	
NURSES AIDES		a Future.	
VT 007 956	194		
Manual for the Nurse's Aide.		OFF FARM AGRICULTURAL OCCUPATIONS	150
WIRDCTNC		VT 002 937 Agricultural Business and Services	162
NURSING VT 006 921	194	for High School Students of	
Staff Development: Motivation and		Vocational Agriculture, 1967.	
Stimulation of Employees,		VT 009 565	179
Instructional Outline.		Supervised Occupational Experience	
VT 008 375	194	in Agriculture; Plans and Records.	
A Curriculum Guide to Public Health Training for the Indian Licensed	1	OFFICE MACHINES	
Practical Nurse.		VT 006 396	182
VT 008 948	195	Office Machines for High Schools.	
Purser Pharmacist Mate Curriculum.			
A Training Curriculum.		OFFICE MANAGEMENT	100
OBJECTIVES		VT 009 610 Office Procedures Used in the	180
VT J08 037	236	Agricultural Services.	
Vocational Education, A		,	
Dramatization.		OFFICE OCCUPATIONS	
		VT 008 839	185
OCCUPATIONAL GUIDANCE VT 003 598	182	Guide Syllabus for the Training of Administrative and Commercial	
Office and Business Practices.	102	Trainees.	
Career Guidance Series.		VT 008 840	185
VT 005 617	213	Recommendations on Commercial and	
Careers Related to Industrial		Clerical Training.	405
Education.	236	VT 008 913 Coordinator's Handbook, Cooperative	186
VT 006 188 ED 029 946 Occupations for You. Part Two.	230	Office Education.	3
occupations for road rate rate		VT 009 174	187
OCCUPATIONAL HOME ECONOMICS		Typewriting: A Tentative Program of	Ē
VT 008 254	199	Instruction.	407
Home Economics Education Guide for	•	VT 009 191 Business and Office Education	187
Instruction Preparatory to Entering Clothing Service Occupations.	<del>ļ</del>	Handbook.	
VT 008 473 ED 029 974	200	VT 009 363	187
Instructional Materials for	,	The Training of Accountants.	
Occupational Home Economics Food		VT 009 365	188
Service Area.	200	The General Training of Clerical	
VT 008 492 ED 029 975 Home Economics Related Occupations	200	Staff.	
Training Plans.		OFFICE OCCUPATIONS EDUCATION	
VT.008 794 ED 030 745	201	VT 007 975	183
Development and Evaluation of a		Suggested Curriculum Guide for:	
Curriculum of Wage Earning		Secretarial.	184
Occupation. VT 009 175	196	VT 007 976 Suggested Curriculum Guide for:	104
A Study in Recruiting and Training	170	Clerical.	*
Home and Institutional Health		VT 007 977	184
Aides.		Suggested Curriculum Guide for:	
VT 009 193	202	Cooperative Office.	100
Guide for Training Homemakers.		VT 007 978 Suggested Curriculum Guide for:	184
		Vocational Office Procedures	

Į.	PAGE	r.	WOR
VT 008 134	185	VT 009 195	166
Programmed Text on Orientation to	4.44.45	Curriculum Guide for Ornamental	
an Office Education Program.		Horticulture.	168
VT 008 913	186	VT 009 297 Small Gasoline Engines, (Ornamental	
Coordinator's Handbook, Cooperative	7	Horticulture).	
Office Education. VT 008 923	186	VT 009 333	175
Cooperative Office Education-	• • •	Flowers to Wear.	
		VT 009 568	179
OFFICE PRACTICE	400	Landscaping the Home Grounds.	
VT 003 598	182	OXY ACETYLENE WELDING	
Office and Business Practices. Career Guidance Series.		VT 009 310	170
VT 007 692	183	Oxy-Acetylene Welding: Setting up	
IBEA Handbook for Teachers of		the Equipment and Lighting the	
Office Procedures.	400	Torch.	171
VT 007 975	183	VT 009 311 Oxy-Acetylene Welding: Flat	*, •
Suggested Curriculum Guide for: Secretarial.		Position Welds.	
vr 007 978	184		
Suggested Curriculum Guide for:		OXYACETYLENE WELDING	222
Vocational Office Procedures.		VT 008 626	223
		Oxy-Acetylene Welding, Technical Information.	
ORAL COMMUNICATION VT 007 228 ED 029 951	236	Information.	
VT 007 228 ED 029 951 Occupational Communication	2.30	PAINTERS	
Competencies: A List of		VT 008 648	223
Audio-Visual Aids.		Job Corps Training Standard for	
		Painter.	
ORIENTATION MATERIALS	191	PARAMEDICAL OCCUPATIONS	
VT 008 454 School and Business Relationships.	131	VT 008 948	195
First-Year Basic Instruction.		Purser Pharmacist Mate Curriculum.	
		A Training Curriculum.	
ORNAMENTAL HORTICULTURE	140	DADY TEMPUMADY TAU	
VT 002 215	162	PARLIAMENTARY LAW VT 008 938	192
Ornamental Horticulture Teaching Materials.		Parliamentary Procedures	
VT 002 693	162	(Transparency Masters).	
Teacher's Manual on How to Use			
Ornamental Horticulture Teaching		PERSONNEL SELECTION	222
Materials.	162	VT 008 624 Suggested Physical Agility Program.	
VT 004 033 Ornamental Horticulture, A Guide	10.2	Suddested Engline "Annual Language	
for Providing Instruction for 11th		PHARMACIST MATE	
and 12th Grade Vocational Educatio	n	VT 008 948	195
in Agriculture.		Purser Pharmacist Mate Curriculum.	
VT 009 195	166	A Training Curriculum.	
Curriculum Guide for Ornamental Horticulture.		PHOTOENGRAVERS	
VT 009 282	166	VT 008 925	226
Grounds Care: Custodial Training		An Introduction to the Art of	
Course.		Photoengraving.	
VT 009 293	167	PHYSICAL FITTNESS	
A Manual on Nursery Practices.		VT 008 624	222
ORNAMENTAL HORTICULTURE OCCUPATION		Suggested Physical Agility Program.	•
VT 002 215	162		
Ornamental Horticulture Teaching		PHYSICAL THERAPY VT 008 931 ED 031 581	195
Materials.	162	VT 008 931 ED 031 581  Manual for Training Leprosy	170
VT 002 693 Teacher's Manual on How to Use	102	Rehabilitation Workers.	
Ornamental Horticulture Teaching			
Materials.		PHYSICAL THERAPY AIDES	195
VT 004 033	162	VT 008 931 ED 031 581 Manual for Training Leprosy	133
Ornamental Horticulture, A Guide for Providing Instruction for 11th	,	Rehabilitation Workers.	
and 12th Grade Vocational Education	on		
in Agriculture.			



	PAGE	PAGE
PHYSICS VT 008 402 Experiments for the Student Laboratory.	219	VT 009 326 174  How to Do a Poultry Autopsy.  VT 009 327 175  Catching and Handling Poultry.  VT 009 329 175
PILOT PROJECTS VT 006 011 Distributive EducationWholesaling. A Pilot Program at Hartford Public High School.	190	Embryo Development of the Chick. VT 009 334 176 Poultry Selection and Judging. VT 009 337 176 Poultry Brooding Management. VT 009 342 177 The Poultry Industry, A Career with
PLANT IDENTIFICATION VT 009 312	171	a Future.
Vegetables. VT 009 336 Plant Identification: Annuals, Perennials, and House Plants.	176	POWER MECHANICS VT 008 733 208 Power: Prime Mover of Technology. Laboratory Manual. VT 008 734 208
PLANT SCIENCE VT 007 861 ED 031 560 Wood Properties and Kinds; A Base Syllabus on Wood Technology.	207	Power: Prime Mover of Technology. Teacher's Manual. VT 008 872 Industrial Arts Curriculum Guide:
VT 009 300 Exercises for Biological Principle	169 es	Industrial Arts, 1968-1969.
in Agricultural Crops. VT 009 323 Exhibiting Plant Products at the Fair.	174	PRACTICAL ARTS VT 009 076  Reports of Consultants and Advisory Specialists. Volume X-A: Industrial and Practical Arts, Vocational
PLOWS VT 009 567 Plows and Plowing.	179	Education, and General Adult Education.  PRACTICAL MATHEMATICS
PLUMBERS VT 000 717 Plumbing Related Course for Apprentices, Part II, Learner's	212	VT 008 494 219 Automechanics Related Math. Assignment Sheets. VT 008 610 221 Industrial Technical Mathematics II
Manual. VT 008 610 Industrial Technical Mathematics I for Plumbers.	221 :I	for Plumbers.  VT 009 235  Occupational Services Academic  Curriculum. Mathematics Resource
PLUMBING VT 000 717 Plumbing Related Course for Apprentices, Part II, Learner's Manual.	212	Book, Grade 10.  VT 009 242  Occupational Services Academic Curriculum. Mathematics Resource Book, Grade 9.
POCKET GOPHERS VT 009 350 Pocket Gophers. POLICE	178	PRACTICAL NURSES  VT 008 375  A Curriculum Guide to Public Health  Training for the Indian Licensed  Practical Nurse.
VT 007 984 Tear Gas Manual.	216	PRACTICAL NURSING VT 007 820 ED 029 955 194
POST SECONDARY EDUCATION VT 008 486 ED 031 565 Water and Wastewater Technology; A Suggested 2-Year Post High School	195	Practical Nursing Education. A Guide for Teaching Basic Concepts and Skills in the Use of Drugs.
Curriculum. POULTRY	170	PRENATAL DEVELOPMENT VT 009 325 Pre-Natal Development of the Calf.
VT 009 308 Anatomy of the Fowl. VT 009 309 Grading Eggs for Quality.	170 170	PRINTING VT 005 914 Instructor's Guide for Printing 1 and 2.



P	AGE	PAC	GE
Graphic Arts 1 and 2. Course of	205	VT 008 486 ED 031 565 19 Water and Wastewater Technology; A Suggested 2-Year Post High School	95
Study. PROGRAM ADMINISTRATION		Curriculum. VT 008 492 ED 029 975 20	00
vr 009 314 ED 032 428  Developing a High School Program in	171	Home Economics Related Occupations Training Plans. VT 008 555	37
Ornamental Horticulture. Volume I, Nursery Management.		Design of Instruction.	21
PROGRAM BUDGETING VT 009 078	165	Training Recommendations. Operatives.	22
Consumable Supply List for Farm Mechanics and General Shop.		Recommendations for Training. Operatives.	
PROGRAM DESCRIPTIONS VT 008 134	185	VT 008 633 2 Monitoring of On-Job Training of	23
Programmed Text on Orientation to an Office Education Program.	101	Craft Apprentices in Electricity Boards Concerned with Distribution. VT 008 642	64
VT 008 454 School and Business Relationships. First-Year Basic Instruction.	191	A Guide for Planning Occupational Programs in Agricultural	
VT 008 840 Recommendations on Commercial and	185	Mechanization. vr 008 838	25
Clerical Training. VT 008 885	191	planning and Supervision of Stage IV Training for Craft Apprentices. VT 008 911	226
Cooperative-Distributive Education; An Alternate Semester Program. VT 008 910	186	Bank Teller. VT 008 913	186
Bookkeeper II. VT 008 911	226	Coordinator's Handbook, Cooperative Office Education. VT 008 923	186
Bank Teller. VT 009 022 A New Craft Is Born; An	227	Cooperative Office Education. VT 009 195	166
Apprenticeship Program for Chemical Process Operator.		Curriculum Guide for Ornamental Horticulture. VT 009 314 ED 032 428	171
VT 009 072 ED 031 594  Developing American Industry  Courses for the Secondary School.	209	Developing a High School Program in Ornamental Horticulture. Volume T, Nursery Management.	
PROGRAM EVALUATION VT 007 777	183	On Management Training and	229
Training for Office Supervision. VT 008 885	191	Pevelopment. VT 009 363 The Training of Accountants.	187
Cooperative-Distributive Education An Alternate Semester Program.	•	VT 009 365 The General Training of Clerical	188
PROGRAM GUIDES VT 002 937	162	Staff. VT 009 366 The Training of Mates as Linesmen	229
Agricultural Business and Services for High School Students of Vocational Agriculture, 1967.		(Steel Tower Lines).	229
VT 004 772 Industrial-Service Engineering Technology, Automotive Major,	213	Monitoring of On-Job Training of Craft Apprentices in Electricity Boards Concerned with Generation.	
Evaluation Monograph. VT 008 079 ED 029 961 Grain, Feed, Seed, and Farm Supply	163	The Training of Operatives in Electricity Boards Concerned with	229
Technology. A Suggested 2-Year Pos High School Curriculum.	t	VT 009 303	230
VT 008 270 Handbook for Industrial Arts	207	The Training of Training Officers.  VT 009 370  On Industrial Staff Traineeships.	230
Education. VT 008 374	185	VT 009 371 The Training of Jointers as	230
A Training Officer's Guide to Commercial Apprenticeship.		Jointers (Extra High Tension).	230
		THE TENTHS OF MACON TO COMPACE	



1	PAGE	I.	PAGE
VT 009 373 The Training of Mates as Linesmen (Wood-Pole). VT 009 375 The Training of Instructors. VT 009 376	<ul><li>230</li><li>231</li><li>231</li></ul>	PUBLIC HEALTH VT 008 375 A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse.	194 1
Craft Apprentice Training Programmes for Electricians, Electrical Fitters, and Meter Mechanicians in Electricity Boards Concerned with Distribution.		QUALITY CONTROL VT 008 983 Arc Welding. Materials and Material Processes Series.	226 L
VT 009 377  Craft Apprentice Training Programmes for Mechanical Fitters, Electrical Fitters, and Instrument Mechanics in Electricity Boards	231	QUESTIONING TECHNIQUES VT 008 992 Developing Economic Concepts through Introduction to Business.	186
Concerned with Generation.  VT 009 378  The Training of Jointers and Linesmen's Mates in Electricity  Poords Concerned with Distribution	231	RATING SCALES VT 008 648 Job Corps Training Standard for Painter.	223
Boards Concerned with Distribution. VT 009 380 The Training of Supervisors.  PROGRAM PLANNING	232	READING DEVELOPMENT VT 009 240 Occupational Services Academic Curriculum. English Resource Book,	239
VT 008 923 Cooperative Office Education. VT 009 175 A Study in Recruiting and Training Home and Institutional Health	186 196	Grade 9.  RECORDKEEPING VT 008 646	164
Aides. PROGRAMED MATERIALS		Farm Business Management Report, 1968. VT 009 299 DuMore Farm Records Problem.	168
VT 008 191 Show Card Lettering and Layout.	190	REFERENCE MATERIALS VT 005 617	213
PROGRAMED TEXTS VT 001 950 ED 023 786 Auto Mechanics: Methodology.	212	Careers Related to Industrial Education. VT 006 739	213
Technical Instruction Manual. VT 001 961 ED 026 455 Practical Electronics. Technical Instruction Manual.	212	Engine-Electrical Tune-Up System. VT 006 740 A.E.A. Tune-Up System; 1968 Wiring Diagrams. Supplement to the A.E.A.	213
VT 007 687 ED 029 953 Principles and Philosophy of Vocational Education. VT 008 134	236 185	Tune-Up Specification Charts.  RELATED INSTRUCTION VT 008 328	208
Programmed Text on Orientation to an Office Education Program. VT 008 191 Show Card Lettering and Layout.	190	Suggested Related Information for the Metal Area. Industrial Arts Comprehensive General Shop Course.	
PROJECT ABLE VT 008 527 ED 030 721 The "Project ABLE" General	220	RESISTORS VT 009 331 Basic Electronic Components: Resistors.	228
Woodworking Curriculum. (Interim Product).  PROJECT AMERICAN INDUSTRY		RESOURCE GUIDES VT 006 598	205
PROJECT AMERICAN INDUSTRY VT 009 072 ED 031 594 Developing American Industry Courses for the Secondary School.	209	Drafting I. Student Problems.  VT 008 269 ED 026 273  Space Resources for the High School. Industrial Arts Resource Units.	207
PROJECT TECHNOLOGY VT 008 870 Technology and the Schools.	225	VT 009 289  Job Analysis, Man Power Allotment and Work Schedules: Custodial Training Course. Resource Manual.	227



Pi	A GE	P A	GB
VT 009 345	229	41 002 302	69
Minor Maintenance: Custodial Training Course.		VI 002 420	88
RESOURCE MATERIALS		Understanding Financial Statements;	
VT 005 916	198	7 Keys to Value.	33
Resource Materials for Family	•	VT 009 615 An Introduction to the Automotive	, , ,
Clothing.	206	Electrical System.	
AT 001 001 HD 021 222	200	VT 009 616 2	34
Laminating and Bending; A Base Syllabus on Wood Technology.		Distributor Coil Generator	
yr 007 858 ED 031 557	206	Regulator: Service Tips.	
Adhesives: A Base Syllabus on Wood		V L 003 017	234
Technology.		It's Easy to be an ExpertBattery	
ут 007 859 ED 031 558	206	Man, That Is.	
Lumber and Related Products: A Base		RESOURCE UNITS	
syllabus on Wood Technology.	207	VT 002 813	198
*I 007 000 ## 00	201	Out on Your Own.	
Wood Substitutes: A Base Syllabus on Wood Technology.		VT 007 853 ED 031 555 2	206
vr 007 861 ED 031 560	207	Woodworking Technology.	
Wood Properties and Kinds; A Base		4 T 0 O O D O D O D	192
Syllabus on Wood Technology.		Color Dynamics for Marketing and	
VT 008 268	207	Distribution.	
Safety Education in the School		numit (TNO	
Shop.	221	RETAILING VT 008 094	190
VT 008 577 Audio-Visual Aids Relating to the	221	Discount Retailing.	
Graphic Arts.		VT 008 824	191
VT 008 778	200	Store Security (Transparency	
Teaching Aids for Home Economics: A	<b>L</b>	Masters).	
Source List.		TOTAL COUNTY DICEPTON	
VT 009 071	164	ROCHESTER CITY SCHOOL DISTRICT	204
Some Vo-Aq Classroom and Laboratory		VT 006 462 Industrial Arts Teachers Handbook.	
Instructional Aids.	165	Tild doct for the formation of the first terms of t	
VT 009 077 Suggested Films for North Dakota	103	RODENTICIDES	
Vocational Agriculture Departments.	i	vr 009 350	178
VT 009 078	165	Pocket Gophers.	178
Consumable Supply List for Farm		41 009 331	170
Mechanics and General Shop.	4.5	Ground Squirrel Control.	
VT 009 079	165	SAFETY EDUCATION	
Suggestions for Equipping the Farm		VT 008 231	237
Mechanics Shop. VT 009 080	165	A Guide to Highway Safety and	
Books and Reference Material for	,	Driver Education.	
Use in North Dakota Vocational		VI 000 124	223
Agriculture Departments.		Safety Handbook: A Guide for Trade	
VI 009 177	166	and Industrial Education Programs.	
Resource Material for Teaching		SALES OCCUPATIONS	
Agricultural Mechanics.	238	VT 008 583	191
VT 009 235 Occupational Services Academic	230	101 Case Problems in Retail	
Curriculum. Mathematics Resource		Selling.	
Book, Grade 10.			
VT 009 236	239	SALESMANSHIP	191
World Cultures Resource Book; Grade	е	VT 008 583 101 Case Problems in Retail	• •
10.	239	Selling.	
VT 009 240 Occupational Services Academic	437	Car	
Curriculum. English Resource Book,		SAN MATEO JUNIOR COLLEGE	
Grade 9.		VT 008 885	19
VT 009 242	239	Cooperative-Distributive Education;	
Occupational Services Academic		An Alternate Semester Program.	
Curriculum. Mathematics Resource			
Book, Grade 9.	167		
VT 009 296	107		

I	PAGE	E	AGE
SCHOOL MAINTENANCE		vr 009 318	172
VT 009 289	227	Fitting and Showing FFA Dairy Cattle.	
Job Analysis, Man Power Allotment and Work Schedules: Custodial		VT 009 319	172
Training Course. Resource Manual.	229	CO-OPS; (Cooperative Organizations Offering Producers Services).	
VT 009 345 Minor Maintenance: Custodial		VT 009 320	173
Training Course.		Fundamentals of Equitation. VT 009 321	173
SCHOOL SAFETY	207	Fat Lamb Project Problems. VT 009 322	173
VT 008 268 Safety Education in the School	201	Evolution in Marketing Farm	
Shop.		Products. VT 009 323	174
SCHOOL SHOPS	207	Exhibiting Plant Products at the Fair.	
VT 008 268 Safety Education in the School	207	VT 009 324	174
Shop.	223	Fitting and Showing FFA Beef. VT 009 325	174
VT 008 724 Safety Handbook: A Guide for Trade		Pre-Natal Development of the Calf.	174
and Industrial Education Programs. VT 009 079	165	VT 009 326 How to Do a Poultry Autopsy.	
Suggestions for Equipping the Farm		VT 009 327 Catching and Handling Poultry.	175
Mechanics Shop.		VT 009 328	175
SCIENCE CURRICULUM VT 009 238	239	Commercial Beef Cattle Projects. VT 009 329	175
Occupational Services Academic		Embryo Development of the Chick. VT 009 330	228
Curriculum, English, Social Studies, Mathematics, Science,		Your Future as a Draftsman.	
Grade 10.	239	VT 009 331 Basic Electronic Components:	228
VT 009 249 Occupational Services Academic	233	Resistors.	175
Curriculum. English, Social Studies, Mathematics, Science,		VT 009 333 Flowers to Wear.	
Grade 9.		VT 009 334 poultry Selection and Judging.	176
SCIENCE INSTRUCTION		VT 009 335	176
VT 009 022 A New Craft Is Born; An	227	Beef Carcass Judging and Grading. VT 009 336	176
Apprenticeship Program for Chemica	1	Plant Identification: Annuals, Perennials, and House Plants.	
Process Operator.		VT 009 337	176
SCRIPTS	166	Poultry Brooding Management. VT 009 338	177
VT 009 173 Swine Carcass Evaluation.		Beef Cattle, Part I, Castration.	177
VT 009 306 Applied Design.	210	VT 009 339 Introduction to Irrigation.	•
VT 009 307	170	VT 009 340 The Food Processing Industry.	177
The Brood Sow and Litter. VT 009 308	170	VT 009 341	177
Anatomy of the Fowl.	170	Use of the Level: Setting Up the Instrument.	
VT 009 309 Grading Eggs for Quality.	• •	VT 009 342 The Poultry Industry, A Career wit	177 th
VT 009 310 Oxy-Acetylene Welding: Setting up	170	a Future.	178
the Equipment and Lighting the		VT 009 350 Pocket Gophers.	
Torch. VT 009 311	171	VT 009 351	178
Oxy-Acetylene Welding: Flat Position Welds.		Ground Squirrel Control. VT 009 568	179
VT 009 312	171	Landscaping the Home Grounds.	
Vegetables. VT 009 313	171	SECONDARY GRADES	205
Beginning Techniques in Flower		VT 007 844 ED 031 554 Units for the Laboratory of	200
Arranging. VT 009 317	172	Industries.	
Use of the Level: Reading the Rod	•		



E	PAGE	P.	AGE
VT 008 993	209	SLIDES	
Woodworking: Vocational-Industrial Education Curriculum Guide.		VT 009 568 Landscaping the Home Grounds.	179
		VT 009 569	180
SECRETARIES VT 007 975	183	Appraising Market Hogs for Carcass Merit.	
Suggested Curriculum Guide for:	,		
Secretarial. VT 009 047	187	SLOW LEARNERS VT 009 081	209
Secretarial Skills and Procedures.		A Suggested Guide for Teaching Slow	
Adult Course Outline.		Learners in Industrial Arts in the Public Schools.	
SECURITY		VT 009 290	202
VT 008 824	191	In-Betweens: A Curriculum Guide for Home Economics Teachers of Students	
Store Security (Transparency Masters).		with Special Learning Needs.	
SEMISKILLED OCCUPATIONS	004	SMALL GASOLINE ENGINES	168
VT 008 569 Training Recommendations.	221	VT 009 297 Small Gasoline Engines, (Ornamental	
Operatives.		Horticulture).	
VT 008 617 Recommendations for Training.	222	SOCIAL STUDIES	
Operatives.		VT 009 236	239
VT 009 176	227	World Cultures Resource Book: Grade 10.	
Coordinated Vocational-Academic Education Metal Trades Program.			239
(Basic Metalworking, Welding, Sheet	ž.	Occupational Services Academic	
Metal Pabricating, Ornamental Ironworking).		Curriculum, English, Social Studies, Mathematics, Science,	
		Grade 10.	239
SERVICE OCCUPATIONS VT 008 254	199	VT 009 249 Occupational Services Academic	233
Home Economics Education Guide for		Curriculum. English, Social	
Instruction Preparatory to Entering Clothing Service Occupations.	7	Studies, Mathematics, Science, Grade 9.	
VT 008 492 ED 029 975	20 <b>0</b>		
Home Economics Related Occupations		SOCIAL STUDIES UNITS VT 009 236	239
Training Plans. VT 008 794 ED 030 745	201	World Cultures Resource Book; Grade	
Development and Evaluation of a		10.	
Curriculum of Wage Earning Occupation.		SOIL CONSERVATION	
		VT 009 298	168
SHEEP VT 009 321	173	Soils Manual for Land Judging.	
Fat Lamb Project Problems.	113	SOIL SCIENCE	4 ( 0
GUOU GARRO		VT 009 298 Soils Manual for Land Judging.	168
SHOW CARDS VT 008 191	190	VT 009 303	169
Show Card Lettering and Layout.		Experiments in Soil Science.	
SKILLED OCCUPATIONS	240	STAFF IMPROVEMENT VT 009 370	230
VT 008 415 Recommendations for Craft	219	On Industrial Staff Traineeships.	250
Apprentice Training 1966.	005	COLOR CURRICULUM CULTURG	
VT 008 841  Recommendations for the Training of	225 f	STATE CURRICULUM GUIDES VT 006 430	204
Boilermaker, Welder and Blacksmith	-	The New Mexico State Planning Guide	<b>:</b>
Apprentices.	231	for Industrial Arts. VT 008 130	184
VT 009 374 The Training of Craft Apprentices.	a J 1	Connecticut Business Education	- •
		Handbook. VT 008 319	218
SKITS VT 008 037	236	Oklahoma Curriculum Guide for	• •
Vocational Education, A		Driver and Traffic Safety	
Dramatization.		Education.	



E	PAGE	P	AGE
VT 009 191 Business and Office Education	187	VT 008 288 Electrical Experiments. Part II:	217
Handbook. VT 009 282	166	A-C Across the Line Control. VT 008 289	217
Grounds Care: Custodial Training Course.		Electrical Experiments. Part III: Basic Electronics.	
VT 009 284 Communications Via Offset	227	VT 008 291 Shop Theory for Machine Trades.	218
Lithography.		Metallurgy of Iron and Steel. Sessions 1-12.	
STATE STANDARDS VT 008 415	219	VT 008 328 Suggested Related Information for	208
Recommendations for Craft Apprentice Training 1966.	217	the Metal Area. Industrial Arts Comprehensive General Shop Course.	
STENOGRAPHERS		VT 008 473 ED 029 974 Instructional Materials for	200
VT 006 670	182	Occupational Home Economics Food	
Business Communication.		Service Area. VT 008 535	220
STUDENT EVALUATION VT 005 237	198	Precision Measurement. VT 008 553	220
Home Economics Evaluation Services	130	Blueprint Reading for Metal Trades.	
in the Junior High School.	400	VT 008 570	221
VT 008 276 Evaluation Guide for Homemaking	199	Welding, Blueprint Reading for Welders.	
Education.			223
STUDENT ORGANIZATIONS		Oxy-Acetylene Welding, Technical Information.	
VT 008 904	201	VT 008 915	226
Future Homemakers of America		Charging Ignition and Cranking	
(Transparency Masters). VT 008 944	192	Systems: Periodic Maintenance and Circuit Checks.	
Distributive Education Clubs of	.,_	VT 009 315	172
America (Transparency Masters).		Judging Vegetable Crops.	
STUDENT PROJECTS		SUBPROFESSIONALS	
VT 008 553  Blueprint Reading for Metal Trades.	220	VT 008 857 Recommendations for the Training of	225
VT 008 626  Oxy-Acetylene Welding, Technical	223	Technicians and Technologists.	•
Information.		SUPERVISION	404
VT 008 733 Power: Prime Mover of Technology.	208	VT 006 921 Staff Development: Motivation and	194
Laboratory Manual.		Stimulation of Employees,	
VT 008 870	225	Instructional Outline.	
Technology and the Schools. VT 009 565	179	SUPERVISORS	
Supervised Occupational Experience		VT 009 287	167
in Agriculture; Plans and Records.		Supervision in Agriculture: A Unit of Instruction.	
STUDENT TEACHING			2.32
VT 007 338 Handbook for the Interns in	163	The Training of Supervisors.	
Agricultural Education.		SUPERVISORY METHODS	
		VT 006 921	194
STUDY GUIDES VT 000 717	212	Staff Development: Motivation and Stimulation of Employees,	
Plumbing Related Course for	212	Instructional Outline.	
Apprentices, Part II, Learner's Manual.		CHDEBUTCODY MEATHTNO	
VT 005 617	213	SUPERVISORY TRAINING VT 007 777	183
Careers Related to Industrial	wo.	Training for Office Supervision.	
Education. VT 006 188 ED 029 946	236	VT 008 839 Guide Syllabus for the Training of	185
Occupations for You. Part Two.		Administrative and Commercial	
VI 008 287	217	Trainees.	167
Electrical Experiments. Part I: Electric Motox Control.		VT 009 287 Supervision in Agriculture: A Unit of Instruction.	101



	PAGE		PAGE
VT 009 380 The Training of Supervisors.	232	VT 009 588 Airman's Information Manual. 1969 Special Pilot Training Edition.	233
SUPPLEMENTARY TEXTBOOKS VT 004 028 You and the Computer. A Student's Guide.	182	SUPPLIES VT 009 071 Some Vo-Ag Classroom and Laborator	164 <b>y</b>
VT 007 390 Fundamentals of Electricity and Magnetism. Training Chart Manual. Section A.	214	Instructional Aids. VT 009 078 Consumable Supply List for Farm Mechanics and General Shop.	165
VT 007 391 Storage Batteries. Training Chart Manual. Section B. VT 007 392	214	SURVEY INSTRUMENTS (ENGINEERING) VT 009 317	172
Cranking Motors. Training Chart Manual. Section C. VT 007 393	214	Use of the Level: Reading the Rod. VT 009 341 Use of the Level: Setting Up the Instrument.	177
Ignition System. Training Chart Manual. Section D. VT 007 394	215	SWINE VT 009 173	166
Generators. Training Chart Manual. Section E. VT 007 395	215	Swine Carcass Evaluation. VT 009 307 The Brood Sow and Litter.	170
Standard Duty Generator Regulator. Training Chart Manual. Section F. VT 007 396	215	VT 009 569 Appraising Market Hogs for Carcass Merit.	160
Heavy Duty Generator Regulators. Training Chart Manual. Section G. VT 007 397 Fundamentals of Semiconductors. Training Chart Manual. Section J.	215	TAILORING VT 008 312 Curriculum Guide for Trades and Industries Tailoring Programs.	218
VT 007 398 Fundamentals of Delcotron Generators. Training Chart Manual. Section K.		TAXONOMY VT 009 296 Insects Identification Manual.	167
VT 007 399 Transistor Regulators. Training Chart Manual. Section L. VT 007 400	216	TEACHER EDUCATION VT 007 687 ED 029 953 Principles and Philosophy of	236
Double Contact Regulators. Trainin Chart Manual. Section R. VT 008 193 Occupational Instructors Handbook	236	Vocational Education. VT 008 193 Occupational Instructors Handbook Manpower Development Training.	236
Manpower Development Training. VT 009 293 A Manual on Nursery Practices.	167	VT 009 369  The Training of Training Officers.  VT 009 375	230 231
VT 009 294 Judging Deciduous Fruit Trees. VT 009 296	167 167	The Training of Instructors. TEACHER IMPROVEMENT	23 .
Insects Identification Manual. VT 009 298 Soils Manual for Land Judging.	168	VT 002 481 Quality Through Growth, A Suggested Guide in Teacher Education for Home	
VT 009 343 Handbook of Coaxial Microwave Measurements. VT 009 344	228 228	Economics Coordinators and Teachers.	
Handbook of Noise Measurement. VT 009 413 Design and Control of Concrete Mixtures.	232	TEACHER INTERNS VT 007 338 Handbook for the Interns in Agricultural Education.	163
VT 009 566 Weed Control, Cultural and Chemical.	179	TEACHING GUIDES VT 001 577 Business Law for High Schools.	182
VT 009 567 Plows and Plowing. VT 009 582	179 2 <b>3</b> 3		
Flight Maneuvers Manual for Instructors and Students.			



P	AGE	P	AGE
VT 002 100	212	VT 008 931 ED 031 581	195
The General Related Units for Industrial Cooperative Training: A		Manual for Training Leprosy Rehabilitation Workers.	196
Suggested Study of Topics Needed by Every Vocational Student, Teachers	,	VT 009 160 Home Health Aide Training Manual.	170
Guide.		VT 009 191	187
VT 002 693	162	Business and Office Education Handbook.	
Teacher's Manual on How to Use Ornamental Horticulture Teaching			210
Materials.		Interpreting Industry Through Line	
VT 003 598	182	Production. VT 009 287	167
Office and Business Practices. Career Guidance Series.		Supervision in Agriculture: A Unit	
VT 005 914	204	of Instruction.	~~~
Instructor's Guide for Printing 1		VT 009 290 In-Betweens: A Curriculum Guide for	202
and 2. VT 005 915	204	Home Economics Teachers of Students	
Instructor's Guide for Senior High	207	with Special Learning Needs.	
School Woodwork in the Tulsa Public	;	V1 005 530	178
Schools (Tentative).	198	Electrical Wiring. VT 009 415	232
VT 005 916 Resource Materials for Family	170	Concrete Technology: Instructor's	
Clothing.		Guide.	
VT 006 396	182	TEAR GAS EQUIPMENT	
Office Machines for High Schools. VT 006 462	204	VI 007 984	216
Industrial Arts Teachers Handbook.		Tear Gas Manual.	
VT 007 692	183	TECHNICAL EDUCATION	
IBEA Handbook for Teachers of Office Procedures.		VT 904 772	213
VT 007 848	163	Industrial-Service Engineering	
Hydraulic Systems for the Farm.		Technology, Automotive Major,	
Resource Unit and Skill Text.	190	Evaluation Monograph. VT 008 402	219
VT 008 021 Communication in Distribution.	130	Experiments for the Student	
First-Year Basic Instruction.		Laboratory.	219
VT 008 231	237	VT 008 414 Guide Syllabuses of Training for	213
A Guide to Highway Safety and Driver Education.		Metallurgical and Chemical	
VT 008 245	191	Technicians.	195
Basic Organization of Distribution.	•	VT 008 486 ED 031 565 Water and Wastewater Technology; A	133
First-Year Basic Instruction. VT 008 290	218	Suggested 2-Year Post High School	
Theory and Fundamental Process		Curriculum.	225
Units, Tool and Diemaking. Grade		VT 008 857 Recommendations for the Training of	
11. VT 008 291	218	Technicians and Technologists.	
Shop Theory for Machine Trades.		VT 008 983	226
Metallurgy of Iron and Steel.		Arc Welding. Materials and Material Processes Series.	_
Sessions 1-12.	218	VT 009 234	238
VT 008 319 Oklahoma Curriculum Guide for	<b>2. 10</b>	An Instructional Manual for	
Driver and Traffic Safety		CARDIAC: A Cardboard Illustrative	
Education.	219	Aid to Computation. VT 009 331	228
VT 008 332 Teaching Aids for Electrical		Basic Electronic Components:	
Experiments. Grade 11. Lesson Plan	•	Resistors.	228
VT 008 454	191	VT 009 343 Handbook of Coaxial Microwave	220
School and Business Relationships. First-Year Basic Instruction.		Measurements.	
VT 008 610	221	VT 009 344	<b>2</b> 28
Industrial Technical Mathematics I	I	Handbook of Noise Measurement. VT 009 379	232
for Plumbers. VT 008 613	221	The Training of Student Engineering	
Machine Trades: Grinding and Heat	•	Apprentices.	233
Treating.	202	VT 009 582  Flight Maneuvers Manual for	<b>433</b>
VT 008 724	223	Instructors and Students.	
Safety Handbook: A Guide for Trade			



	PAGE	p	AGE
VT 009 588  Airman's Information Manual. 1969  Special Pilot Training Edition.  VT 009 856  Microfiche Collection of	233	VT 002 100 The General Related Units for Industrial Cooperative Training; A Suggested Study of Topics Needed by Every Vocational Student, Teachers	212
Clearinghouse Documents Reported i Abstracts of Instructional Materials in Vocational and Technical Education (AIM), Fall	.n	Guide. VT 003 533 Technical Subjects, Courses of Study.	<ul><li>213</li><li>213</li></ul>
1969. VT 009 857 Abstracts of Instructional Materials in Vocational and	240	VT 004 772 Industrial-Service Engineering Technology, Automotive Major, Evaluation Monograph.	
Technical Education (AIM), Fall 1969.		VT 005 617 Careers Related to Industrial Education.	<ul><li>213</li><li>213</li></ul>
TECHNICAL OCCUPATIONS VT 008 857 Recommendations for the Training of	225 of	VT 006 739 Engine-Electrical Tune-Up System. VT 006 740	213
Technicians and Technologists.  TECHNOLOGISTS  VT 008 857  Recommendations for the Training of	225	A.E.A. Tune-Up System; 1968 Wiring Diagrams. Supplement to the A.E.A. Tune-Up Specification Charts. VT 007 390  Fundamentals of Electricity and Magnetism. Training Chart Manual.	214
Technicians and Technologists.  TESTING PROGRAMS  VT 008 624	222	Section A.  VT 007 391  Storage Batteries. Training Chart  Manual. Section B.	214
Suggested Physical Agility Program TEXTBOOKS	1.	VT 007 392 Cranking Motors. Training Chart	214
VT 007 956  Manual for the Nurse's Aide.	194 216	Manual. Section C. VT 007 393 Ignition System. Training Chart	214
Tear Gas Manual. VT 008 269 ED 026 273 Space Resources for the High	207	Manual. Section D. VT 007 394 Generators. Training Chart Manual.	215
School. Industrial Arts Resource Units.	226	Section E. VT 007 395 Standard Duty Generator Regulator.	215
VT 008 925 An Introduction to the Art of Photoengraving. VT 008 949	164	Training Chart Manual. Section F. VT 007 396 Heavy Duty Generator Regulators.	215
How to Grade Furs. VT 008 983 Arc Welding. Materials and Materia	226	Training Chart Manual. Section G. VT 007 397 Fundamentals of Semiconductors.	215
Processes Series.  TOOL AND DIE MAKERS		Training Chart Manual. Section J. VT 007 398 Fundamentals of Delcotron	215
VT 008 290 Theory and Fundamental Process Units, Tool and Diemaking. Grade 11.	218	Generators. Training Chart Manual. Section K. VT 007 399 Transistor Regulators. Training Chart Manual. Section L.	216
TRADE AND INDUSTRIAL EDUCATION VT 000 717 Plumbing Related Course for	212	VT 007 400  Double Contact Regulators. Trainin  Chart Manual. Section R.	216 q 216
Apprentices, Part II, Learner's Manual.	212	VT 007 984 Tear Gas Manual. VT 008 136	216
VT 001 950 ED 023 786 Auto Mechanics: Methodology. Technical Instruction Manual. VT 001 961 ED 026 455	212	Guide for Course of Study for Welder Combination. VT 008 287	217
Practical Electronics. Technical Instruction Manual.	J . W	Electrical Experiments. Part I: Electric Motor Control. VT 008 288 Electrical Experiments. Part II; A-C Across the Line Control.	217

	PAGE	1	PAGE
VT 008 290 Theory and Fundamental Process Units, Tool and Diemaking. Grade	<b>21</b> 8	VT 008 633 Monitoring of On-Job Training of Craft Apprentices in Electricity	223
11. VT 008 291	218	Boards Concerned with Distribution. VT 008 648	223
Shop Theory for Machine Trades. Metallurgy of Iron and Steel. Sessions 1-12.		Job Corps Training Standard for Painter. VT 008 724	•••
VT 008 312 Curriculum Guide for Trades and	218	Safety Handbook: A Guide for Trade and Industrial Education Programs.	233
Industries Tailoring Programs. VT 008 332	219	VT 008 731 Curriculum Guide for Trades and	224
Teaching Aids for Electrical Experiments. Grade 11. Lesson Plan VT 008 402	<b>.</b> 219	Industries Brick Masonry. VT 008 805	224
Experiments for the Student Laboratory.	213	The Cranking Circuit (and How It Works).  VT 008 806	224
VT 008 414 Guide Syllabuses of Training for	219	Introducing the Delcotron Generator and the Charging Circuit.	
Metallurgical and Chemical Technicians. VT 008 415	240	VT 008 807 Let's Talk Energizers and Batteries	224 s
Recommendations for Craft Apprentice Training 1966.	219	Testing and Servicing. VT 008 808 Regulation and the Charging	224
VT 008 535 Precision Measurement.	220	Circuit. VT 008 809	225
VT 008 536 Vocational Automotive Mechanics A	220	20,000 Volts under the Hood: The Ignition Circuit and How It Works.	
Teacher,s Outline. VT 008 537 Vocational Industrial Drafting. A	208	VT 008 838  Planning and Supervision of Stage IV Training for Craft Apprentices.	225
Teacher's Outline. VT 008 553	220	VT 008 841 Recommendations for the Training of	225 £
Blueprint Reading for Metal Trades VT 008 555	237	Boilermaker, Welder and Blacksmith Apprentices.	
Design of Instruction. VT 008 569 Training Recommendations.	221	VT 008 857  Recommendations for the Training of Technicians and Technologists.	225 E
Operatives. VT 008 570	221	VT 008 915 Charging Ignition and Cranking	226
Welding, Blueprint Reading for Welders.		Systems: Periodic Maintenance and Circuit Checks.	
VT 008 577 Audio-Visual Aids Relating to the Graphic Arts.	221	VT 008 925 An Introduction to the Art of Photoengraving.	226
VT 008 610 Industrial Technical Mathematics II	221 I	VT 008 983 Arc Welding. Materials and Material	226 L
for Plumbers. VT 008 611	221	Processes Series. VT 009 022	227
Proposed Occupational Preparation Program in Metal Skills. VT 008 613	221	A New Craft Is Born; An Apprenticeship Program for Chemical Process Operator.	L
Machine Trades: Grinding and Heat Treating.	221	VT 009 176 Coordinated Vocational-Academic	227
VT 008 617 Recommendations for Training.	222	Education Metal Trades Program. (Basic Metalworking, Welding, Sheet	:
Operatives. VT 008 623 Metallurgical Technology. A	222	Metal Fabricating, Ornamental Ironworking).	227
Suggested 2-Year Post High School Curriculum.		VT 009 289  Job Analysis, Man Power Allotment and Work Schedules: Custodial	227
VT 008 625 Uniform Fire Science Curriculum.	222	Training Course. Resource Manual. VT 009 330	228
VT 008 626 Oxy-Acetylene Welding, Technical Information.	223		228
a as a V L m G C L U II e		Handbook of Coaxial Microwave Measurements. VT 009 344	228
		Handbook of Noise Measurement.	

1	PAGE		PAGE
VT 009 345 Minor Maintenance: Custodial Training Course.	229	TRADE AND INDUSTRIAL TEACHERS VT 009 369 The Training of Training Officers.	230
on Management Training and Development.	229	VT 009 375 The Training of Instructors.	231
VT 009 366 The Training of Mates as Linesmen (Steel Tower Lines).	229	TRANSISTOR VOLTAGE REGULATORS VT 007 399 Transistor Regulators. Training	216
VT 009 367 Monitoring of On-Job Training of Craft Apprentices in Electricity	229	Chart Manual. Section L. TRANSISTORS	
Boards Concerned with Generation.  VT 009 368	229	VT 007 397  Fundamentals of Semiconductors.  Training Chart Manual. Section J.	215
The Training of Operatives in Electricity Boards Concerned with Distribution.		VT 007 399 Transistor Regulators. Training	216
VT 009 370 On Industrial Staff Traineeships. VT 009 371	230 230	Chart Manual. Section L. TRANSPARENCIES	
The Training of Jointers as Jointers (Extra High Tension).	230	VT 002 215 Ornamental Horticulture Teaching Materials.	162
VT 009 372 The Training of Mates as Jointers. VT 009 373	230	VT 008 824 Store Security (Transparency	191
The Training of Mates as Linesmen (Wood-Pole). VT 009 374	231	Masters). VT 008 904 Future Homemakers of America	20 1
The Training of Craft Apprentices.  VT 009 375  The Training of Instructors.	231	(Transparency Masters). VT 008 905 Consumer Education (Transparency	201
VT 009 376 Craft Apprentice Training	231	Masters). VT 008 938 Parliamentary Procedures	192
Programmes for Electricians, Electrical Fitters, and Meter Mechanicians in Electricity Boards Concerned with Distribution.		(Transparency Masters).  VT 008 944  Distributive Education Clubs of America (Transparency Masters).	192
VT 009 377 Craft Apprentice Training Programmes for Mechanical Fitters, Electrical Fitters, and Instrument		TREES VT 009 294	167
Mechanics in Electricity Boards Concerned with Generation. VT 009 378	231	Judging Deciduous Fruit Trees. TYPEWRITING	407
The Training of Jointers and Linesmen's Mates in Electricity Boards Concerned with Distribution		VT 009 174  Typewriting: A Tentative Program of Instruction.	187 o <b>f</b>
VT 009 380 The Training of Supervisors. VT 009 413 Design and Control of Concrete	232 232	UNIT PLAN VT 009 299 DuMore Farm Records Problem.	168
Mixtures. VT 009 415 Concrete Technology: Instructor's Guide.	232	UNITS OF STUDY (SUBJECT FIELDS) VT 007 844 ED 031 554 Units for the Laboratory of	205
VT 009 592  Automobile Mechanics: An Outline for Trade and Industrial Programs.	233	Industries. VT 007 853 ED 031 555 Woodworking Technology.	206
VT 009 615 An Introduction to the Automotive Electrical System. VT 009 616	233	VEGETABLE CROP JUDGING VT 009 315 Judging Vegetable Crops.	172
Distributor Coil Generator Requlator: Service Tips. VT 009 617	234	VEGETABLES VT 009 312	171
It's Easy to be an ExpertBatter Man, That Is.		Vegetables.	



	PAGE		PAGE
VERBAL COMMUNICATIONS		VT 009 173	166
VT 008 555 Design of Instruction.	237	Swine Carcass Evaluation. VT 009 177	166
VISITING HOMEMAKERS		Resource Material for Teaching Agricultural Mechanics.	
VT 009 193 Guide for Training Homemakers.	202	VT 009 287 Supervision in Agriculture: A Unit	167
·		of Instruction.	167
VISUAL PERCEPTION VT 008 989	192	VT 009 293 A Manual on Nursery Practices.	107
Color Dynamics for Marketing and	134	VT 009 294	167
Distribution.		Judging Deciduous Fruit Trees. VT 009 296	167
VOCATIONAL ADJUSTMENT VT 002 100	212	Insects Identification Manual. VT 009 297	168
The General Related Units for	212	Small Gasoline Engines, (Ornamenta	_
Industrial Cooperative Training:		Horticulture).	168
Suggested Study of Topics Needed   Every Vocational Student, Teachers	D <b>y</b> = 1	VT 009 298 Soils Manual for Land Judging.	100
Guide.	5	VT 009 299	168
VOCAMIONAL ACDICULMUDE		DuMore Farm Records Problem. VT 009 300	169
VOCATIONAL AGRICULTURE VT 002 215	162	Exercises for Biological Principle	
Ornamental Horticulture Teaching		in Agricultural Crops.	169
Materials.	162	VT 009 301 Tool Identification Manual.	103
VT 002 693 Teacher's Manual on How to Use	102	VT 009 302	169
Ornamental Horticulture Teaching		Shady Lane Farm Management and	
Materials. VT 002 937	162	Records Problem. VT 009 303	169
Agricultural Business and Services		Experiments in Soil Science.	
for High School Students of		VT 009 307 The Brood Sow and Litter.	170
Vocational Agriculture, 1967. VT 004 033	162	VT 009 308	170
Ornamental Horticulture, A Guide		Anatomy of the Fowl.	170
for Providing Instruction for 11th and 12th Grade Vocational Education		VT 009 309 Grading Eggs for Quality.	170
in Agriculture.	OH.	VT 009 310	170
VT 007 338	163	Oxy-Acetylene Welding: Setting up the Equipment and Lighting the	
Handbook for the Interns in Agricultural Education.		Torch.	
VT 007 848	163	VT 009 311	171
Hydraulic Systems for the Parm.		Oxy-Acetylene Welding: Flat Position Welds.	
Resource Unit and Skill Text. VT 008 042	163	VT 009 312	171
Basic Curriculum for Vocational		Vegetables.	171
Agriculture in Texas. Production		VT 009 313 Beginning Techniques in Flower	171
Agriculture. VT 008 642	164	Arranging.	
A Guide for Planning Occupational		VT 009 314 ED 032 428	171
Programs in Agricultural Mechanization.		Developing a High School Program i Ornamental Horticulture. Volume I.	
vr 009 071	164	Nursery Management.	
Some Vo-Ag Classroom and Laborato	LÀ	VT 009 315	172
Instructional Aids. VT 009 077	165	Judging Vegetable Crops. VT 009 317	172
Suggested Films for North Dakota		Use of the Level; Reading the Rod.	
Vocational Agriculture Department	S.	VT 009 318	172
VT 009 078 Consumable Supply List for Farm	165	Fitting and Showing FFA Dairy Cattle.	
Mechanics and General Shop.		VT 009 319	172
VT 009 079	165	CO-OPS: (Cooperative Organizations Offering Producers Services).	5
Suggestions for Equipping the Far Mechanics Shop.	ш	VT 009 320	173
VT 009 080	165	Fundamentals of Equitation.	173
Books and Reference Material for Use in North Dakota Vocational		VT 009 321 Fat Lamb Project Problems.	1/3
Agriculture Departments.			



E	PAGE	F	AGE
VT 009 322	173	VT 007 687 ED 029 953	236
Evolution in Marketing Farm		Principles and Philosophy of	
Products.	174	Vocational Education. VT 008 037	236
VT 009 323 Exhibiting Plant Products at the	1/4	Vocational Education, A	TAY
Fair.		Dramatization.	237
VT 009 324  Fitting and Showing FFA Beef.	174	VT 008 880 Books for Training Officers.	231
VT 009 325	174	VT 009 055	238
Pre-Natal Development of the Calf.	474	Curriculum Materials. Annotated Listing of Materials Available from	_
VT 009 326 How to Do a Poultry Autopsy.	174	Public Education Agencies.	•
VT 009 327	175	VT 009 076	238
Catching and Handling Poultry.	175	Reports of Consultants and Advisory Specialists. Volume X-A: Industrial	? 1
VT 009 328  Commercial Beef Cattle Projects.	175	and Practical Arts, Vocational	•
VT 009 329	175	Education, and General Adult	
Embryo Development of the Chick.	175	Education. VT 009 235	238
VT 009 333 Flowers to Wear.	175	Occupational Services Academic	
VT 009 334	176	Curriculum. Mathematics Resource	
Poultry Selection and Judging.	176	Book, Grade 10. VT 009 856	240
VT 009 335  Beef Carcass Judging and Grading.	176	Microfiche Collection of	
VT 009 336	176	Clearinghouse Documents Reported in	n
Plant Identification: Annuals,		Abstracts of Instructional Materials in Vocational and	
Perennials, and House Plants. VT 009 337	176	Technical Education (AIM), Pall	
Poultry Brooding Management.		1969-	240
VT 009 338	177	VT 009 857 Abstracts of Instructional	240
Beef Cattle, Part I, Castration. VT 009 339	177	Materials in Vocational and	
Introduction to Irrigation.		Technical Education (AIM), Fall	
VT 009 340	177	1969.	
The Food Processing Industry. VT 009 341	177	WATER AND WASTE WATER TECHNOLOGY	
Use of the Level: Setting Up the		VT 008 486 ED 031 565	195
Instrument.	177	Water and Wastewater Technology; A Suggested 2-Year Post High School	
VT 009 342 The Poultry Industry, A Career with		Curriculum.	
a Future.		TARRE BECOME CEC	
VT 009 350	178	WATER RESOURCES VT 008 486 ED 031 565	195
Pocket Gophers. VT 009 351	178	Water and Wastewater Technology; A	
Ground Squirrel Control.	470	Suggested 2-Year Post High School	
VT 009 390 Electrical Wiring.	178	Curriculum.	
VT 009 565	179	WEEDS	470
Supervised Occupational Experience		VT 009 566	179
in Agriculture; Plans and Records. VT 009 566	179	Weed Control, Cultural and Chemical.	
Weed Control, Cultural and	***		
Chemical.	470	WELDERS VT 008 136	216
VT 009 567 Plows and Plowing.	179	Guide for Course of Study for	
VT 009 568	179	Welder Combination.	224
Landscaping the Home Grounds.	100	VT 008 570 Welding, Blueprint Reading for	221
VT 009 569 Appraising Market Hogs for Carcass	180	Welders.	
Merit.		VT 008 626	223
VT 009 610	180	Oxy-Acetylene Welding, Technical Information.	
Office Procedures Used in the Agricultural Services.		VT 009 310	170
		Oxy-Acetylene Welding: Setting up	
VOCATIONAL EDUCATION	236	the Equipment and Lighting the Torch.	
VT 007 228 ED 029 951 Occupational Communication	<b>430</b>	VT 009 311	171
Competencies; A List of		Oxy-Acetylene Welding: Plat	
Audio-Visual Aids.		Position Welds.	



PAGE

179

180

219

162

#### SUBJECT AND IDENTIFIER INDEX

	PAGE	1
WELDING		WORKBOOKS
VT 008 626 Oxy-Acetylene Welding, Technical	223	VT 009 565 Supervised Occupational Experience
Information. VT 008 983	226	in Agriculture; Plans and Records. VT 009 610
Arc Welding. Materials and Material Processes Series.	1	Office Procedures Used in the Agricultural Services.
VT 009 310 Oxy-Acetylene Welding: Setting up	170	WORKBOOKS, *TRADE AND INDUSTRIAL
the Equipment and Lighting the Torch.		EDUCATION VT 008 494
VT 009 311 Oxy-Acetylene Welding: Flat	171	Automechanics Related Math. Assignment Sheets.
Position Welds.		WORKSHOPS
WHOLESALING	400	VT 002 937
VT 006 011 Distributive	190	Agricultural Business and Services for High School Students of
EducationWholesaling. A Pilot Program at Hartford Public High School.		Vocational Agriculture, 1967.
WILDLIFE MANAGEMENT	<b>4</b> C 40	
VT 008 949 How to Grade Furs.	164	
WINSTON SALEM FORSYTH COUNTY SCHOOLS VT 009 194	210	
Senior High School Industrial Arts		
WOODWORKING VT 005 915	204	
Instructor's Guide for Senior High School Woodwork in the Tulsa Public	c	
Schools (Tentative). VT 007 853 ED 031 555	206	
Woodworking Technology. VT 007 857 ED 031 556	206	
Laminating and Bending; A Base Syllabus on Wood Technology.		
VT 007 858 ED 031 557 Adhesives: A Base Syllabus on Wood	206	
Technology.	005	
VT 007 859 ED 031 558 Lumber and Related Products; A Base	206 e	
Syllabus on Wood Technology.  VT 007 860 ED 031 559  Wood Substitutes; A Base Syllabus	207	
on Wood Technology.		
VT 007 861 ED 031 560 Wood Properties and Kinds; A Base Syllabus on Wood Technology.	207	
VT 008 527 ED 030 721 The "Project ABLE" General Woodworking Curriculum. (Interim	220	
Product) VT 008 993	209	
Woodworking: Vocational-Industrial Education Curriculum Guide.	207	
WOODWORKING MACHINE OPERATORS		

216



VT 008 192

(Entry).

Guide for Course of Study for Woodworking Machine Operatory

	PAGE	Ŗ	PAGE
ALLEN, RAY VT 009 310 Oxy-Acetylene Welding: Setting up the Equipment and Lighting the	170	AUTOMOTIVE ELECTRIC ASSOCIATION, DETROIT, MICH. VT 006 739 Engine-Electrical Tune-Up System. VT 006 740	213 213
Torch. VT 009 311 Oxy-Acetylene Welding: Flat Position Welds.	171	A.E.A. Tune-Up System; 1968 Wiring Diagrams. Supplement to the A.E.A. Tune-Up Specification Charts.	213
ALLINGTON CORP., ALEXANDRIA, VA. VT 006 188 ED 029 946 Occupations for You. Part Two.	236	AVIATION BOOK CO., GLENDALE, CALEF. VT 009 588 Airman's Information Manual. 1969 Special Pilot Training Edition.	233
ALTOONA AREA HIGH SCHOOL, PA.  VT 008 794 ED 030 745  Development and Evaluation of a  Curriculum of Wage Earning  Occupation.	201	BAILEY, ROGER S. VT 009 306 Applied Design.	210
AMERICAN INSTITUTES FOR RESEARCH, PITTSBURGH, PA.	•	BARRICK, HARRY T. VT 008 535 Precision Measurement.	220
VT 008 527 ED 030 721 The "Project ABLE" General Woodworking Curriculum. (Interim Product).	220	BARRON, LAWRENCE, AND OTHERS VT 009 081 A Suggested Guide for Teaching Slow Learners in Industrial Arts	209
AMERICAN VOCATIONAL ASSOCIATION, WASHINGTON, D.C.		in the Public Schools.	
VT 008 037 Vocational Education, A Pramatization.	236	BAUGH, FRANK VT 009 318 Fitting and Showing FFA Dairy Cattl	172 le.
AMERICAN VOCATIONAL ASSOCIATION, WASHINGTON, D.C. AGRICULTURAL DIV. VT 007 699 ED 027 400 A Description and Source Listing of Professional Information in Agricultural Education, 1964-65, 1965-66.	163	BECKET, JAMES W. VT 009 287 Supervision in Agriculture: A Unit of Instruction.  BELL TELEPHONE LABORATORIES, NEW YORK, N.Y. VT 009 234	167 238
AMES, KATHRYN G. VT 008 375 A Curriculum Guide to Public Health Training for the Indian	194	An Instructional Manual for CARDIAC: A Cardboard Illustrative Aid to Computation.	
Licensed Practical Nurse.  ANDREWS, DALE VT 009 294  Judging Deciduous Fruit Trees.	167	BENNETT, ROBERT VT 008 885 Cooperative-Distributive Education: An Alternate Semester Program.	191
ARIZONA STATE DEPT. OF VOCATIONAL EDUCATION, PHOENIX VT 007 975	183	BENT, EDWARD W. VT 008 625 Uniform Fire Science Curriculum.	222
Suggested Curriculum Guide for: Secretarial. VT 007 976 Suggested Curriculum Guide for:	184	BENZE, ALEXANDER VT 008 925 An Introduction to the Art of	226
Clerical. VT 007 977 Suggested Curriculum Guide for: Cooperative Office.	184	Photoengraving.  BERMAN, JAMES  VT 009 297	168
VT 007 978 Suggested Curriculum Guide for: Vocational Office Procedures.	184	Small Gasoline Engines, (Ornamental Horticulture).	



P	AGE		PAGE
BERNDT, WILLIAM, COMP. VT 009 055 Curriculum Materials. Annotated Listing of Materials Available from Public Education Agencies. BINGHAM, V.N.	238	CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF BUSINESS EDUCATION VT 008 885  Cooperative-Distributive Education; An Alternate Semester Program.	191
VT 008 374  A Training Officer's Guide to Commercial Apprenticeship.	185	CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF INDUSTRIAL EDUCATION	
BIRKETT, RICHARD J. VT 009 321 Fat Lamb Project Problems.	173	VT 008 611 Proposed Occupational Preparation Program in Metal Skills. VT 008 624	221
BLOSS, NORMAN VT 009 610 Office Procedures Used in the Agricultural Services.	180	Suggested Physical Agility Program VT 008 625 Uniform Fire Science Curriculum.	222
BOYNTON, PAUL M., ED. VT 008 130 Connecticut Business Education Handbook.	184	CALIFORNIA STATE POLYTECHNIC COLL., SAN LUIS OBISPO VT 009 293 A Manual on Nursery Practices. VT 009 294 Judging Deciduous Fruit Trees.	167 167
BRANNUM, TOM VT 009 328 Commercial Beef Cattle Projects. VT 009 338	175 177	VT 009 296 Insects Identification Manual. VT 009 297 Small Gasoline Engines,	167 168
Beef Cattle, Part I, Castration.  BRITISH ASSOCIATION FOR COMMERCIAL AND INDUSTRIAL EDUCATION, LONDON		(Ornamental Horticulture). VT 009 298 Soils Manual for Land Judging. VT 009 300	168 169
(ENGLAND) VT 008 374 A Training Officer's Guide to Commercial Apprenticeship. VT 008 880	185 237	Exercises for Biological Principles in Agricultural Crops. VT 009 301 Tool Identification Manual. VT 009 303	169 169
Books for Training Officers.  BROWN, HOWARD C., AND OTHERS	23,	Experiments in Soil Science. VT 009 308 Anatomy of the Powl.	170
VT 009 3%4 ED 032 428  Developing a High School Program in Ornamental Horticulture. Volume I, Nursery Management.	171	VT 009 309 Grading Eggs for Quality. VT 009 310 Oxy-Acetylene Welding: Setting up the Equipment and Lighting the	170 170
BRUNER, W.H. VT 009 569 Appraising Market Hogs for Carcass	180	Torch.  VT 009 311  Oxy-Acetylene Welding: Plat  Position Welds.	171
Merit. EURGHARDT, PAUL G. VT 008 923	186	VT 009 312 Vegetables. VT 009 313	171 171
Cooperative Office Education.  BYER, JOE		Beginning Techniques in Flower Arranging. VT 009 314 ED 032 428	171
VT 008 494 Automechanics Related Math. Assignment Sheets.	219	Developing a High School Program in Ornamental Horticulture. Volume I, Nursery Management.	172
CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF AGRICULTURAL EDUCATION		VT 009 315 Judging Vegetable Crops. VT 009 318 Fitting and Showing FFA Dairy Catt	172
TT 009 287 Supervision in Agriculture: A Unit of Instruction.	167	VT 009 320 Fundamentals of Equitation. VT 009 321 Fat Lamb Project Problems. VT 009 322 Evolution in Marketing Farm Produc	173 173 173 :ts.
		michaelm with manageming and a contraction	



E	AGE	P P	AGE
VT 009 323	174	CALIFORNIA STATE POLYTECHNIC COLL., SAN LUIS OBISPO. DEPT. OF INDUSTRIAL	
Exhibiting Plant Products at the Fair.	174	TECHNOLOGY VT 009 330	228
VT 009 324 Fitting and Showing FFA Beef. VT 009 325	174	4 L 00 3 3 3 1	228
pre-Natal Development of the Calf. VT 009 326	174	Basic Electronic Components: Resistors.	
How to Do a Poultry Autopsy. VT 009 327	175	CALIFORNIA STATE POLYTECHNIC COLL.	
Catching and Handling Poultry. VT 009 328	175	SAN LUIS OBISPO. DEPT. OF ORNAMENTAL HORTICULTURE	175
Commercial Beef Cattle Projects. VT 009 329	175	VT 009 333 Flowers to Wear. VT 009 336	176
Embryo Development of the Chick. VT 009 335	176	Plant Identification: Annuals, Perennials, and House Plants.	
Beef Carcass Judging and Grading. VT 009 337	176	CALIFORNIA STATE POLYTECHNIC COLL.,	
Poultry Brooding Management. VT 009 338 Beef Cattle, Part I, Castration.	177	SAN LUIS OBISPO. DEPT. OF POULTRY INDUSTRY	
VT 009 341 Use of the Level: Setting Up the	177	VT 009 334 Poultry Selection and Judging.	176
Instrument. Vr 009 342	177	CALIFORNIA STATE POLYTECHNIC COLL.,	
The Poultry Industry, A Career with a Future.		SAN LUIS OBISPO. FARM MANAGEMENT DEPT.	168
VT 009 350 Pocket Gophers.	178	VT 009 299 Dumore Farm Records Problem.	169
VT 009 351 Ground Squirrel Control.	178	VT 009 302 Shady Lane Farm Management and Records Problem.	103
CALIFORNIA STATE POLYTECHNIC COLL., SAN LUIS OBISPO. AGRICULTURAL COUNCIL OF CALIFORNIA. VT 009 319 CO-OPS: (Cooperative Organizations	1 <b>7</b> 2	CALIFORNIA UNIV., DAVIS. DEPT. OF APPLIED BEHAVIORAL SCIENCES VT 009 287 Supervision in Agriculture: A Unit of Instruction.	167
Offering Producers Services).  CALIFORNIA STATE POLYTECHNIC COLL., SAN LUIS OBISPO. ANIMAL HUSBANDRY DEPT.		CANADIAN DEPT. OF AGRICULTURE, OTTAWA (ONTARIO) VT 008 949	164
VT 009 173 Swine Carcass Evaluation.	166	How to Grade Furs.	
CALIFORNIA STATE POLYTECHNIC COLL., SAN LUIS OBISPO. DEPT. OF AGRICULTURAL ENGINEERING VT 009 317	172	CARN, LUELLA L. VT 008 794 ED 030 745  Development and Evaluation of a Curriculum of Wage Earning Occupation.	201
Use of the Level: Reading the Rod. VT 009 339 Introduction to Irrigation.	177	CARPET INDUSTRY TRAINING BOARD, WILMSLOW, CHESHIRE (ENGLAND).	221
CALIFORNIA STATE POLYTECHNIC COLL., SAN LUIS OBISPO. DEPT. OF ANIMAL		Training Recommendations. Operativ	es.
HUSBANDRY VT 009 307 The Brood Sow and Litter.	170	CARTER, L.S. VT 009 298 Soils Manual for Land Judging.	168
CALIFORNIA STATE POLYTECHNIC COLL., SAN LUIS OBISPO. DEPT. OF EDUCATION VT 009 306	210	CARTER, LOGAN S. VT 009 303 Experiments in Soil Science.	169
Applied Design.  CALIFORNIA STATE POLYTECHNIC COLL.,		CERAMICS GLASS AND MINERAL PRODUCTS INDUSTRY TRAINING BOARD, LONDON	
SAN LUIS OBISPO. DEPT. OF FOOD PROCESSING VT 009 340 The Food Processing Industry.	177	(ENGLAND) VT 008 617 Recommendations for Training. Operatives.	222



	PAGE	P	AGE
CHICAGO BOARD OF EDUCATION, ILL. VT 008 467 Short-Term Course for Cooks in Long-Term Care Facilities. Curriculum Guide for Health Occupations.	199	Connecticut Business Education Handbook.	184
CHICAGO POLICE DEPT., ILL. TRAINING		CONNECTICUT STATE DEPT. OF EDUCATION, HARTFORD. DIV. OF VOCATIONAL EDUCATION	
VT 007 984 Tear Gas Manual.	216		190
CHIZEK, GAYLORD J. VT 009 302 Shady Lane Farm Management and	169	Electrical Experiments. Part I:	217
Records Problem.  CLEMSON UNIV., S.C. DEPT. OF		Electric Motor Control.  VT 008 288  Electrical Experiments. Part II: A- C Across the Line Control.	217
INDUSTRIAL EDUCATIO  VT 008 724  Safety Handbook: A Guide for Trade and Industrial Education Programs.			217
VT 008 731  Curriculum Guide for Trades and Industries Brick Masonry.	224		218
CLEMSON UNIV., S.C. DEPT. OF INDUSTRIAL EDUCATION VT 008 724	223	VT 008 332 Teaching Aids for Electrical Experiments. Grade 11. Lesson Plan.	219
Safety Handbook: A Guide for Trade and Industrial Education Programs. VT 008 731 Curriculum Guide for Trades and Industries Brick Masonry.		Shop Theory for Machine Trades.	218
CLEMSON UNIV., S.C. VOCATIONAL EDUCATION MEDIA CENTER VT 008 312  Curriculum Guide for Trades and	218	Metallurgy of Iron and Steel. Sessions 1-12. COURTNEY, KATHLEEN, AND OTHERS	
Industries Tailoring Programs. VT 008 824 Store Security (Transparency	191		198
Masters). VT 008 904 Puture Homemakers of America (Transparency Masters).	201	Evaluation Guide for Homemaking	199
VT 008 905 Consumer Education (Transparency Masters).	201	Education.  CURTIS, EARLE E.	
VT 008 938 Parliamentary Procedures (Transparency Masters).	192	VT 008 037 Vocational Education, A Dramatization.	236
VT 008 944 Distributive Education Clubs of America (Transparency Masters).	192	11 000 775	209
COHEN, BERNARD H. VT 009 432 Free Teaching Materials for Adult	240	Woodworking: Vocational-Industrial Education Curriculum Guide.  DELAMETER, CHARLES	
Vocational Programs.  COLLEGE OF SAN MATEO, CALIF.  VT 008 885	191		175
Cooperative-Distributive Education: An Alternate Semester Program.	151	DELAMETER, CHARLES M. VT 009 329 Embryo Development of the Chick.	175

	PAGE	P	AGE
DELCO REMY, ANDERSON, IND. VT 007 390 Fundamentals of Electricity and	214	DEVANTER, GORDON VAN VT 009 350 Pocket Gophers.	178
Magnetism. Training Chart Manual. Section A. VT 007 391	214	DEVITO, RAYMOND, AND OTHERS	239
Storage Batteries. Training Chart Manual. Section B. VT 007 392	214	World Cultures Resource Book; Grade 10.	
Cranking Motors. Training Chart Manual. Section C. VT 007 393	214	DUARTE, ARTHUR C. VT 009 299 DuMore Farm Records Problem.	168
Ignition System. Training Chart Manual. Section D. VT 007 394	215	DUFFY, JOSEPH W. VT 008 733	208
Generators. Training Chart Manual. Section E. VT 007 395	215	Power: Prime Mover of Technology. Laboratory Manual. VT 008 734	208
Standard Duty Generator Regulator. Training Chart Manual. Section F. VT 007 396	215	Power: Prime Mover of Technology. Teacher's Manual.	
Heavy Duty Generator Regulators. Training Chart Manual. Section G. VT 007 397	215	DUNLAP AND ASSOCIATES, INC., DARIEN, CONN. VT 009 432	240
Fundamentals of Semiconductors. Training Chart Manual. Section J. VY 007 398	215	Pree Teaching Materials for Adult Vocational Programs.	
Fundamentals of Delcotron Generators. Training Chart Manual. Section K.		EASON, ALICE L. VT 008 931 ED 031 581 Manual for Training Leprosy	195
VT 007 399 Transistor Regulators. Training Chart Manual. Section L.	216	Rehabilitation Workers.  EASTERN KENTUCKY UNIV., RICHMOND	
VT 007 400  Double Contact Regulators.  Training Chart Manual. Section R.	216	Laminating and Bending: A Base Syllabus on Wood Technology.	2v6
VT 009 615 An Introduction to the Automotive Electrical System.	233	Adhesives: A Base Syllabus on Wood Technology.	206
VT 009 616 Distributor Coil Generator Regulator: Service Tips.	234	Lumber and Related Products: A Base Syllabus on Wood Technology.	206
VT 009 617 It's Easy to be an ExpertBattery Man, That Is.	234	Wood Substitutes; A Base Syllabus on Wood Technology.	207 207
DENVER PUBLIC SCHOOLS, COLO. VT 002 813	198	VT 007 861 BD 031 560 Wood Properties and Kinds; A Base Syllabus on Wood Technology.	207
Out on Your Own.  DENVER PUBLIC SCHOOLS, COLO. DIV. OF	,	ELECTRICITY SUPPLY INDUSTRY TRAINING BOARD, LONDON (ENGLAND) VT 008 633	223
INSTRUCTIONAL SERVICES VT 005 237 Home Economics Evaluation Services in the Junior High School.	198 ;	Monitoring of On-Job Training of Craft Apprentices in Electricity Boards Concerned with Distribution.	
DEPARTMENT OF EMPLOYMENT AND PRODUCTIVITY, LONDON (ENGLAND)		VT 009 362 On Management Training and Development.	229
VT 008 555 Design of Instruction.	237	The Training of Accountants. VT 009 364	187 187
DEPARTMENT OF THE INTERIOR, WASHINGTON, D.C. VT 008 486 ED 031 565	195	Syllabus of Training for Accountant VT 009 365 The General Training of Clerical	s. 188
Water and Wastewater Technology; A Suggested 2-Year Post High School Curriculum.		Staff. VT 009 366 The Training of Mates as Linesmen (Steel Tower Lines).	229

	PAGE		PAGE
VT 009 367 Monitoring of On-Job Training of	229	VT 008 778 Teaching Aids for Home Economics:	200
Craft Apprentices in Electricity Boards Concerned with Generation. VT 009 368	229	A Source List. VT 009 282	166
The Training of Operatives in Electricity Boards Concerned with	223	Grounds Care: Custodial Training Course. VT 009 289	227
Distribution. VT 009 369 The Training of Training Officers.	230	Job Analysis, Man Power Allotment and Work Schedules: Custodial	
VT 009 370 On Industrial Staff Traineeships.	230	Training Course. Resource Manual. VT 009 345 Minor Maintenance: Custodial	229
VT 009 371 The Training of Jointers as	230	Training Course.	
Jointers (Extra High Tension). VT 009 372 The Training of Mates as Jointers.	230	FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE. DIV. OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION	
VT 009 373 The Training of Mates as Linesmen	230	VT 009 268 Resource Guide, Housing and Home	202
(Wood-Pole). VT 009 374 The Training of Craft Apprentices.	231	Furnishings.  GEBHART, RICHARD H.	
VT 009 375 The Training of Instructors.	231	VT 009 072 ED 031 594 Developing American Industry	209
VT 009 376 Craft Apprentice Training	231	Courses for the Secondary School.	
Programmes for Electricians, Electrical Fitters, and Meter Mechanicians in Electricity Boards		GENERAL ELECTRIC CO., SCHENECTADY, N.Y. EDUCATIONAL PUBLICATIONS VT 004 028	182
Concerned with Distribution. VT 009 377	231	You and the Computer. A Student's Guide.	102
Craft Apprentice Training Programmes for Mechanical Pitters,		GENERAL MOTORS CORP., ANDERSON, IND.	
Electrical Fitters, and Instrument Mechanics in Electricity Boards Concerned with Generation.		DELCO REMY DIV. VT 008 805 The Cranking Circuit (and How It	224
VT 009 378 The Training of Jointers and	231	Works). VT 008 806	224
Linesmen's Mates in Electricity Boards Concerned with Distribution. VT 009 379	232	Introducing the Delcotron Generator and the Charging Circuit VT 008 807	- 224
The Training of Student Engineering Apprentices.	232	Let's Talk Energizers and Batteries Testing and Servicing.	<b>€</b> 2
VT 009 380 The Training of Supervisors.	232	VT 008 808  Regulation and the Charging Circui	
ELLIS, O.H. VT 008 824	191	VT 008 809 20,000 Volts under the Hood: The Ignition Circuit and How It Works.	225
Store Security (Transparency Masters).	,,,	GENERAL MOTORS CORP., ANDERSON,	
FEIRER, JOHN L. VT 008 269 ED 026 273	207	INDIANA. DELCO REMY DIV. VT 008 915	226
Space Resources for the High School. Industrial Arts Resource Units.	207	Charging Ignition and Cranking Systems: Periodic Maintenance and Circuit Checks.	
FINGERMAN, SAUL		GENERAL RADIO CO., WEST CONCORD, MASS.	
VT 009 234 An Instructional Manual for CARDIAC: A Cardboard Illustrative Aid to Computation.	238	VT 008 402 Experiments for the Student Laboratory.	219
PLORIDA STATE DEPT. OF EDUCATION,		GENERAL RADIO COMPANY, WEST CONCORD, MASS.	, , , , , , , , , , , , , , , , , , ,
TALLAHASSEE VT 008 456 Economic Education Scope and	237	VT 009 343 Handbook of Coaxial Microwave Measurements.	228
Sequence Chart, 1969. A Handbook.		VT 009 344 Handbook of Noise Measurement	228



P	AGE	ri	, G.E.
GEORGIA STATE DEPT. OF EDUCATION, ATLANTA. DIV. OF VOCATIONAL		HAWVER, CARL F. VT 008 372 A One Week Teaching Unit on	199
EDUCATION VT 008 276	199	Consumer Finance. Teacher's Kit.	
Evaluation Guide for Homemaking Education.		HOFFMAN, KENNETH E. VT 008 191	190
GEORGIA UNIV., ATHENS. DEPT. OF HOME		Show Card Lettering and Layout.	
ECONOMICS EDUCATION VT 008 276	199	HOOVER NORMAN, AND OTHERS	
Evaluation Guide for Homemaking Education.		VT 009 565 Supervised Occupational Experience in Agriculture: Plans and Records.	179
GIBBS, GORDON L.	454	HOHELMON H B AND OTHERS	
VT 009 335  Beef Carcass Judging and Grading.	176	HOUGHTON, W.F., AND OTHERS VT 007 777 Training for Office Supervision.	183
GORHAM STATE COLL., MAINE	205	HOUSTON, E. RAY	
VT 007 844 ED 031 554 Units for the Laboratory of	203	VT 009 336	176
Industries.		Plant Identification: Annuals, Perennials, and House Plants.	
GORHAM STATE TEACHERS COLL., MAINE.		HUCKABEE, JUNE, COMP.	
INDUSTRIAL ARTS DEPT. VT 008 268	207	VT 008 021	190
Safety Education in the School Shop	p. 210	Communication in Distribution. First-Year Basic Instruction.	
VT 009 281 Interpreting Industry Through Line		titat-legt pdate rupordocione	
Production.		41 007 17J	196
GRAY, DAVIS A.		A Study in Recruiting and Training	
vr 009 343 Handbook of Coaxial Microwave	228	Home and Institutional Health Aides.	
Measurements.		**** NA	
		HUNT, ELIZABETH E. VT 009 076	238
GRAY, STANTON VT 009 294	167	Reports of Consultants and	
Judging Deciduous Fruit Trees.		Advisory Specialists. Volume X-A: Industrial and Practical Arts,	
GROSS, ERVIN, JR.	228	Vocational Education, and General Adult Education.	
VT 009 344  Handbook of Noise Measurement.	220	Addit Eddoctone	
handbook of noise head teme		HYER, EDGAR A.	173
HAGELBARGER, DAVID	220	VT 009 322 Evolution in Marketing Farm Product	
VT 009 234 An Instructional Manual for	238	EAOLECTOR IN Her record 1 and 11 and 1	
CARDIAC: A Cardboard Illustrative		IHNE, BARBARA	472
Aid to Computation.		VT 009 320 Fundamentals of Equitation.	173
DETERMINE TIT		rundamentals of Edulation.	
HALDON BOOKS, INC., PALATINE, ILL. VT 009 582	233	ILLINOIS BUSINESS EDUCATION	
Flight Maneuvers Manual for		ASSOCIATION, CHICAGO	183
Instructors and Students.		VT 007 692 IBEN Handbook for Teachers of	103
HARTFORD BOARD OF EDUCATION, CONN.		Office Procedures.	
VT 006 011	190	A CUTIODEN AND	
Distributive Education		ILLINOIS STATE DEPT. OF CHILDREN AND FAMILY SERVICES. DIV. OF CHILD	
Wholesaling. A Pilot Program at Hartford Public High School.		WELFARE	
udiciond Labite mide Soucote		VT 009 193	202
HARTZLER, F.E.	227	Guide for Training Homemakers.	
VT 007 687 ED 029 953	236	INDIANA DIV. OF SECONDARY VOCATIONAL	
Principles and Philosophy of Vocational Education.		EDUCATION, TERRE HAUTE	
		VT 008 535	220
HARTZLER, F.E., AND OTHERS VT 008 134	185	Precision Measurement.	
Programmed Text on Orientation to an Office Education Program.			



	PAGE		PAGE
INDIANA STATE COLL., TERRE HAUTE. INSTRUCTIONAL MATERIALS LAB. VT 008 626 Oxy-Acetylene Welding, Technical Information. INDIANA STATE DEPT. OF PUBLIC INSTRUCTION. INDIANAPOLIS.	223	INTERNATIONAL SOCIETY FOR REHABILITATION OF THE DISABLED, NEW YORK, N.Y. COMMITTEE ON LEPROSY REHABILITATION VT 008 931 ED 031 581 Manual for Training Leprosy Rehabilitation Workers.	195
TRADE-INDUSTRIAL-TECHNICAL EDUCATION BRANCH VT 008 610 Industrial Technical Mathematics II for Plumbers.	221	IRON AND STEEL INDUSTRY TRAINING BOARD, LONDON (ENGLAND) VT 008 414 Guide Syllabuses of Training for Metallurgical and Chemical Technicians.	219
INDIANA STATE DEPT. OF PUBLIC INSTRUCTION, INDIANAPOLIS. DISTRIBUTIVE EDUCATION SERVICE		VT 008 415 Recommendations for Craft Apprentice Training 1966.	219
VT 008 583 101 Case Problems in Retail Selling	191 9-	VT 008 838  Planning and Supervision of Stage IV Training for Craft Apprentices.	225
INDIANA STATE DEPT. OF PUBLIC INSTRUCTION, INDIANAPOLIS. TRADE AND INDUSTRIAL SERVICE VT 008 570	221	VT 008 839 Guide Syllabus for the Training of Administrative and Commercial Trainees.	185
Welding, Blueprint Reading for Welders. VT 008 626	223	VT 008 840 Recommendations on Commercial and Clerical Training.	185
Oxy-Acetylene Welding, Technical Information.  INDIANA STATE DEPT. OF PUBLIC		VT 008 841  Recommendations for the Training of Boilermaker, Welder and	225
INSTRUCTION, INDIANAPOLIS. TRADE-INDUSTRIAL-TECHNICAL EDUCATION BRANCH VT 008 613	221	Blacksmith Apprentices. VT 008 857 Recommendations for the Training of Technicians and Technologists.	225
Machine Trades: Grinding and Heat Treating. INDIANA STATE DEPT. OF PUBLIC	221	ITOH, MASAYOSHI VT 008 931 ED 031 581 Manual for Training Leprosy Rehabilitation Workers.	195
INSTRUCTION, INDIANAPOLIS.  VOCATIONAL HOME ECONOMICS EDUCATION  VT 008 473 ED 029 974  Instructional Materials for Occupational Home Economics Food	200	JOHNSON, HAROLD C. VT 009 307 The Brood Sow and Litter.	170
Service Area.  INDIANA STATE UNIV., TERRE HAUTE VT 008 570	224	JONES, SHEILA VT 008 555 Design of Instruction.	237
Welding, Blueprint Reading for Welders.	221	KANSAS STATE BOARD FOR VOCATIONAL EDUCATION, TOPEKA VT 007 687 ED 029 953	236
INDIANA STATE UNIV., TERRE HAUTE. DISTRIBUTIVE EDUCATION SERVICE VT 008 583 101 Case Problems in Retail Selling	191	Principles and Philosophy of Vocational Education. VT 008 134	185
INDIANA STATE UNIV., TERRE HAUTE. VOCATIONAL INSTRUCTIONAL MATERIALS LAB.	, •	Programmed Text on Orientation to an Office Education Program. VT 008 191 Show Card Lettering and Layout.	190
VT 008 535 Precision Measurement.	220	KANSAS STATE TEACHERS COLL., EMPORIA VT 007 687 ED 029 953 Principles and Philosophy of	236
INDIANA STATE UNIV., TERRE HAUTE, INSTRUCTIONAL MATERIALS LAB. VT 008 553 Blueprint Reading for Metal Trades.	220	Vocational Education. VT 008 134 Programmed Text on Orientation to	185
wearny for netal Itades.		an Office Education Program. VT 008 191 Show Card Lettering and Layout.	190



1	PAGE	•	PAGE
KENT STATE UNIV., OHIO VT 009 592 Automobile Mechanics: An Outline for Trade and Industrial Programs.	233	LOUISIANA STATE DEPT. OF EDUCATION, BATON ROUGE. VOCATIONAL BUSINESS AND OFFICE EDUCATION SECTION VT 008 913 Coordinator's Handbook,	186
KLAUSTERMEYER, JAMES		Cooperative Office Education.	
VT 009 351	178		
Ground Squirrel Control.		VT 009 319	172
KNOEDLER, EVELYN L. VT 007 956	194	CO-OPS: (Cooperative Organizations Offering Producers Services).	
Manual for the Nurse's Aide.	194	offering Producers Services,.	
		LUTER, ROBERT R.	
KUPSINEL, P., ED.		VT 008 989	192
VT 008 492 ED 029 975 Home Economics Related Occupations Training Plans.	200	Color Dynamics for Marketing and Distribution.	
		LUTER, ROBERT R., COMP.	
LEACH, RICHARD, AND OTHERS	400	VT 008 245	191
VT 009 342 The Poultry Industry, A Career	177	Basic Organization of Distribution. First-Year Basic	
with a Future.		Instruction.	
Walle w I de de Ce		VT 008 454	191
LEFLORE COUNTY SCHOOL DISTRICT,		School and Business Relationships.	
MISS.		First-Year Hasic Instruction.	
VT 009 076	238	******	
Reports of Consultants and		MAINE STATE DEPT. OF EDUCATION,	
Advisory Specialists. Volume X-A: Industrial and Practical Arts,		AUGUSTA VT 009 081	209
Vocational Education, and General		A Suggested Guide for Teaching	203
Adult Education.		Slow Learners in Industrial Arts in the Public Schools.	
LEHMAN, WALTER, AND OTHERS	040	HITTO COLUT DIDE OF PRICIATOR	
VT 004 772	213	MAINE STATE DEPT. OF EDUCATION, AUGUSTA. BUREAU OF VOCATIONAL	
Industrial-Service Engineering Technology, Automotive Major,		EDUCATION	
Evaluation Monograph.		VT 009 281	210
		Interpreting Industry Through Line	
LEIGHTY, R.V.		Production.	
VT 009 298	168	VT 009 284	227
Soils Manual for Land Judging.		Communications Via Offset Lithography.	
LEWISBURG AREA SCHOOL DISTRICT, PA. VT 009 175	196	MARATHON COUNTY BOARD OF VOCATIONAL,	
A Study in Recruiting and Training	130	TECHNICAL AND ADULT EDUCATION,	
Home and Institutional Health		WAUSAU, WIS.	
Aides.		VT 004 772	213
		Industrial-Service Engineering	
LOS ANGELES CITY SCHOOLS, CALIF.		Technology, Automotive Major,	
EVALUATION AND RESEARCH SECTION	242	Evaluation Monograph.	
VT 005 617 Careers Related to Industrial	213	MARATHON COUNTY TECHNICAL INST.,	
Education.		WAUSAU, WIS.	
		VT 004 772	213
LOUGHRAN, BERNICE B.		Industrial-Service Engineering	
VT 009 306	210	Technology, Automotive Major,	
Applied Design.		Evaluation Monograph.	
LOUISIANA STATE DEPT. OF EDUCATION,		MATERIALS AND MECHANICS RESEARCH	
BATON ROUGE. BUSINESS AND OFFICE		CENTER (ARMY), WATERTOWN, MASS.	
EDUCATION SECTION		QUALITY AND RELIABILITY ASSURANCE	
VT 009 191	187	HANDBOOK	
Business and Office Education		VT 008 983	226
Handbook.		Arc Welding. Materials and Material Processes Series.	



	PAGE		PAGE
MCDONOUGH, FRANCES S. VT 008 136 Guide for Course of Study for Welder Combination.	216	VT 008 537 Vocational Industrial Drafting. A Teacher's Outline.	208
VT 008 192 Guide for Course of Study for Woodworking Machine Operatory (Entry).	216	MISSOURI STATE DEPT. OF EDUCATION, JEFFERSON CITY VT 008 270 Handbook for Industrial Arts	207
VT 008 194  Guide for Course of Study for Electronic Mechanic (Any Ind.) (Entry).	217	Education.  MISSOURI STATE DEPT. OF EDUCATION, JEFFERSON CITY. AGRICULTURAL	
MCGLOTHLEN, VERN VT 009 35!	178	EDUCATION SECTION VT 009 177 Resource Material for Teaching	166
Ground Squirrel Control.		Agricultural Mechanics.	
MCROBBIE, J.M. VT 009 330 Your Future as a Draftsman.	228	MISSOURI UNIV., COLUMBIA. DEPT. OF AGRICULTURAL EDUCATION VT 009 177	166
MEACHAM, V.H. VT 009 341	177	Resource Material for Teaching Agricultural Mechanics.	
Use of the Level: Setting Up the Instrument.		MORGAN, WILLIAM P., JR. VT 009 293 A Manual on Nursery Practices.	167
MERRIAM, JOHN L. VT 009 339	177	MORRIS, HAROLD D.	
Introduction to Irrigation.  METAL TRADES ADVISORY COMMITTEE,		VT 009 299 DuMore Farm Records Problem-	168
BEDFORD, IND. VT 008 553 Blueprint Reading for Metal Trades	220	MORROW, MARY ELIZABETH VT 008 794	201
MIAMI-DADE JUNIOR COLLEGE, FLA. DEPT. OF BUSINESS INFORMATION SYSTEMS		Occupation.  NATIONAL AERONAUTICS AND SPACE	
VT 007 235 Business Information Systems; Course Outline.	183	ADMINISTRATION, WASHINGTON, D.C. VT 008 269 ED 026 273 Space Resources for the High School. Industrial Arts Resource	207
MICHIGAN INDUSTRIAL EDUCATION SOCIETY, INC., DETROIT VT 008 577	221	Units.  NATIONAL ASSOCIATION FOR PRACTICAL	
Audio-Visual Aids Relating to the Graphic Arts.		NURSE EDUCATION AND SERVICE, INC., NEW YORK, N.Y. VT 007 820 ED 029 955	194
WILLS, MICHAEL VT 009 325 Pre-Natal Development of the Calf.	174	Practical Nursing Education. A Guide for Teaching Basic Concepts and Skills in the Use of Drugs.	
MINISTRY OF LABOR, LONDON (ENGLAND). CENTRAL TRAINING COUNCIL VT 007 777 Training for Office Supervision.	183	NATIONAL BOOK LEAGUE, LONDON (ENGLAND) VT 008 880 Books for Training Officers.	237
MINNESOTA UNIV., ST. PAUL. INST. OF AGRICULTURE VT 007 848	163	NATIONAL COMMITTEE FOR EDUCATION IN FAMILY PINANCE, NEW WORK, N.Y. VT 002 813	198
Hydraulic Systems for the Farm. Resource Unit and Skill Text.	10.3	Out on Your Own.	130
HISSISSIPPI STATE DEPT. OF EDUCATION, JACKSON. CURRICULUM LAB. VT 008 536	220	NATIONAL CONSUMER FINANCE ASSOCIATION, WASHINGTON, D.C. EDUCATIONAL SERVICES DIV. VT 008 372	199
Vocational Automotive Mechanics. A Teacher, s Outline.		A One Week Teaching Unit on Consumer Finance. Teacher's Kit.	



	PAGE		PAGE
NATIONAL READY MIXED CONCRETE ASSOCIATION, SILVER SPRING, MD. VT 009 415 Concrete Technology: Instructor's Guide.	232	NEW YORK STOCK EXCHANGE, N.Y. VT 009 498 Understanding Financial Statements: 7 Keys to Value.	188
NELSON, RICHARD S. VT 008 625 Uniform Fire Science Curriculum.	222	NORTH CAROLINA STATE BOARD OF EDUCATION, RALEIGH. DEPT. OF COMMUNITY COLLEGES VT 004 033 Ornamental Horticulture, A Guide	162
NEW JERSEY STATE DEPT, OF EDUCATION, TRENTON. DIV. OF VOCATIONAL EDUCATION VT 008 923	186	for Providing Instruction for 11th and 12th Grade Vocational Education in Agriculture.	
Cooperative Office Education. VT 008 925 An Introduction to the Art of Photoeugraving.	226	NORTH CAROLINA STATE DEPT. OF PUBLIC INSTRUCTION, RALEIGH. AGRICULTURAL EDUCATION SECTION VT 002 215	162
NEW MEXICO INDUSTRIAL ARTS ASSOCIATION VT 006 430	204	Ornamental Horticulture Teaching Materials. VT 002 693 Teacher's Manual on How to Use	162
The New Mexico State Planning Guide for Industrial Arts.	<i>;</i>	Ornamental Horticulture Teaching Materials.	
NEW MEXICO STATE DEPT. OF EDUCATION, SANTA FE VT 006 430  The New Mexico State Planning	204	NORTH CAROLINA STATE DEPT. OF PUBLIC INSTRUCTION, RALEIGH. DIV. OF V VT 004 033 Ornamental Horticulture, A Guide	162
Guide for Industrial Arts.  NEW ORLEANS PUBLIC SCHOOLS, LA. DIV.	, , ,	for Providing Instruction for 11th and 12th Grade Vocational Education in Agriculture.	
OF INSTRUCTION VT 009 174 Typewriting: A Tentative Program of Instruction.	187	NORTH CAROLINA STATE DEPT. OF PUBLIC INSTRUCTION, RALEIGH. DIV. OF VOCATIONAL EDUCATION VT 004 033	162
NEW YORK CITY BOARD OF EDUCATION, N.Y. VT 001 577 Business Law for High Schools.	182	Ornamental Horticulture, A Guide for Providing Instruction for 11th and 12th Grade Vocational Education in Agriculture.	
VT 003 598 Office and Business Practices, Career Guidance Series.	182	NORTH CAROLINA STATE DEPT. OF PUBLIC INSTRUCTION, RALEIGH. TRADE AND INDUSTRIAL EDUCATION	
NEW YORK CITY BOARD OF EDUCATION, N.Y. BUREAU OF CURRICULUM DEVELOPMENT VT 006 396 Office Machines for High Schools.	182	VT 002 100 The General Related Units for Industrial Cooperative Training; A Suggested Study of Topics Needed by Every Vocational Student,	212
NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF BUSINESS AND DISTRIBUTIVE EDUCATION		Teachers' Guide.  NORTH CAROLINA STATE UNIV., RALEIGH.	
TT 008 992  Developing Economic Concepts  through Introduction to Business.	186	DEPT. OF INDUSTRIAL EDUCATION VT 002 100 The General Related Units for Industrial Cooperative Training: A	212
VT 009 047 Secretarial Skills and Procedures. Adult Course Outline.	187	Suggested Study of Topics Needed by Every Vocational Student, Teachers' Guide.	
NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF SECONDARY CURRICULUM DEVELOPMENT VT 008 642	164	NORTH DAKOTA STATE UNIV., FARGO. DEPT. OF AGRICULTURAL EDUCATION VT 009 071 Some Vo-Ag Classroom and	164
A Guide for Planning Occupational Programs in Agricultural Mechanization.		Laboratory Instructional Aids. VT 009 077 Suggested Films for North Dakota Vocational Agriculture Departments.	165



	PAGE		PAGE
VT 009 078 Consumable Supply List for Farm Mechanics and General Shop. VT 009 079 Suggestions for Equipping the Farm Mechanics Shop. VT 009 080 Books and Reference Material for Use in North Dakota Vocational Agriculture Departments.	165 165 165	OHIO STATE DEPT. OF EDUCATION, COLUMBUS. TRADE AND INDUSTRIAL EDUCATION SERVICE VT 000 717 Plumbing Related Course for Apprentices, Part II, Learner's Manual. VT 009 592 Automobile Mechanics; An Outline for Trade and Industrial Programs.	212 233
OAKLAND PUBLIC SCHOOLS, CALIF. VT 009 172 Homemaking Guide. Section III; Children.	201	OHIO STATE UNIV., COLUMBUS. CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION VT 009 856 Microfiche Collection of	240
OFFICE OF ECONOMIC OPPORTUNITY, WASHINGTON, D.C. VT 008 648 Job Corps Training Standard for Painter.	223	Clearinghouse Documents Reported in Abstracts of Instructional Materials in Vocational and Technical Education (AIM), Fall 1969.  VT 009 857	240
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. WT 008 079 ED 029 961 Grain, Feed, Seed, and Farm Supply Technology. A Suggested 2-Year Post High School Curriculum.	163	Abstracts of Instructional Materials in Vocational and Technical Education (AIM), Fall 1969.	240
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. DIV. OF VOCATIONAL AND TECHNICAL EDUCATION VT 009 055	238	OHIO STATE UNIV., COLUMBUS. DEPT. OF AGRICULTURAL EDUCATION VT 002 937 Agricultural Business and Services for High School Students of Vocational Agriculture, 1967.	162
Curriculum Materials. Annotated Listing of Materials Available from Public Education Agencies.		VT 009 566  Weed Control, Cultural and Chemical VT 009 567  Plows and Plowing.	179 L. 179
OHIO STATE DEPT. OF EDUCATION, COLUMBUS. AGRICULTURAL EDUCATION SERVICE VT 002 937	162	VT 009 568  Lagdscaping the Home Grounds.  VT 009 569	179 180
Agricultural Business and Services for High School Students of Vocational Agriculture, 1967.		Appraising Market Hogs for Carcass Merit. VT 009 610 Office Procedures Used in the	180
Weed Control, Cultural and Chemical VT 009 567 Plows and Plowing. VT 009 568	179 L• 179	Agricultural Services.  OKLAHOMA CURRICULUM IMPROVEMENT COMMISSION, OKLAHOMA CITY. STATE	
Landscaping the Home Grounds. VT 009 569 Appraising Market Hogs for Carcass Merit. VT 009 610	180	COMMITTEE ON DRIVER AND TRAFFIC SAFETY EDUC. VT 008 319 Oklahoma Curriculum Guide for Driver and Traffic Safety Education.	218
Office Procedures Used in the Agricultural Services.  OHIO STATE DEPT. OF EDUCATION, COLUMBUS. DIV. OF VOCATIONAL EDUCATION VT 009 290	202	OKLAHOMA STATE DEPT. OF EDUCATION, OKLAHOMA CITY VT 008 319 Oklahoma Curriculum Guide for Driver and Traffic Safety Education.	218
In-Betweens: A Curriculum Guide for Home Economics Teachers of Students with Special Learning Needs.	202	OLIVER, CRAIG S.	179



	PAGE		PAGE
ONTARIO DEPT. OF EDUCATION, CANADA. THE SCIENCE, TECHNOLOGY, AND TRADES BRANCH VT 003 533 Technical Subjects, Courses of Stu	•	PLANK, HARRY VT 009 610 Office Procedures Used in the Agricultural Services. PLUMBERS VOCATIONAL SCHOOL,	180
ORANGE COUNTY SCHOOL BOARD, ORLANDO, FLA. VT 008 872 Industrial Arts Curriculum Guide: Industrial Arts, 1968-1969.	209	BLOOMINGTON. JOINT APPRENTICESHIP COMMITTEE VT 008 610 Industrial Technical Mathematics II for Plumbers.	221
OREGON STATE BOARD OF EDUCATION, SALEM VT 009 195 Curriculum Guide for Ornamental Horticulture.	166	PORTLAND CEMENT ASSOCIATION, CHICAGO, ILL. VT 009 415 Concrete Technology: Instructor's Guide.	232
PAUTZ, ROLAND VT 009 337 Poultry Brooding Management. PENN HILLS SCHOOL DISTRICT,	176	PORTLAND CEMENT ASSOCIATION, SKOKIE, ILL. VT 009 413 Design and Control of Concrete Mixtures.	232
PITTSBURGH, PA. VT 009 235 Occupational Services Academic Curriculum. Mathematics Resource Book, Grade 10. VT 009 236 World Cultures Resource Book; Grade 10. VT 009 238	238 239 239	PUBLIC HEALTH SERVICE (DHEW), WASHINGTON, D.C. DIV. OF INDIAN HEALTH VT 008 375 A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse. VT 008 791 ED 030 744	194 195
Occupational Services Academic Curriculum, English, Social Studies, Mathematics, Science, Grade 10.  VT 009 240 Occupational Services Academic Curriculum. English Resource Book, Grade 9.	239	Dental Assistant Training; Standard Course Outline.  PUBLIC HEALTH SERVICE HOSPITAL, STATEN ISLAND, N.Y.  VT 008 948 Purser Pharmacist Mate Curriculum. A Training Curriculum.	195
VT 009 242 Occupational Services Academic Curriculum. Mathematics Resource Book, Grade 9. VT 009 249 Occupational Services Academic	239	RANNELLS, ROBERT VT 007 848 Hydraulic Systems for the Farm. Resource Unit and Skill Text.	163
Curriculum. English, Social Studies, Mathematics, Science, Grade 9.		RICHARD, HERMAN VT 009 325 Pre-Natal Development of the Calf.	174
PENNSYLVANIA STATE DEPT. OF PUBLIC INSTRUCTION, HARRISBURG. DIV. OF HIGHWAY AND AVIATION EDUCATION VT 008 231  A Guide to Highway Safety and	237	RIDENOUR, HARLAN E. VT 009 566 Weed Control, Cultural and Chemica. ROBERTS, ROY W.	
PENNSYLVANIA STATE UNIV., UNIVERSITY PARK. DEPT. OF NURSING VT 006 921 Staff Development: Motivation and Stimulation of Employees,	194	VT 009 076 Reports of Comsultants and Advisory Specialists. Volume X-A: Industrial and Practical Arts, Vocational Education, and General Adult Education.	238
Instructional Outline. PETERSON, ARNOLD P.G.	222	ROCHESTER CITY SCHOOL DISTRICT, N.Y. VT 006 462 Industrial Arts Teachers' Handbook	
VT 009 344 Handbook of Nolse Measurement.	228	VT 006 598 Drafting I. Student Problems. VT 006 745 Data Processing I	205 183



	PAGE		PAGE
ROCHESTER CITY SCHOOL DISTRICT, N.Y. CURRICULUM OFFICE VT 006 670 Business Communication.	182	SEARS, STAN VT 009 173 Swine Carcass Evaluation.	166
ROCHESTER CITY SCHOOL DISTRICT, N.Y. INDUSTRIAL ARTS DEPT. VT 006 650 General Metal Work 1 and 2. Course	205	SEEBER, GLENN VT 009 310 Oxy-Acetylene Welding: Setting up the Equipment and Lighting the Torch.	170
of Study. VT 006 765 Graphic Arts 1 and 2. Course of Study.	205	VT 009 311 Oxy-Acetylene Welding: Flat Position Welds.	171
ROGALLA, JOHN A. VT 009 302 Shady Lane Farm Management and Records Problem.	169	SEEBURGER, JOHN VT 008 613 Machine Trades: Grinding and Heat Treating.	221
RUTTLE, TERENCE VT 008 949 How to Grade Furs.	164	SMALL BUSINESS ADMINISTRATION, WASHINGTON, D.C. VT 008 094 Discount Retailing.	190
SAINT CLOUD PUBLIC SCHOOLS, MINN. AREA VOCATIONAL-TECHNICAL SCHOOL VT 008 646 Farm Business Management Report, 1968.	164	SMITH, ELIZABETH M. VT 007 820 ED 029 955 Practical Nursing Education. A Guide for Teaching Basic Concepts and Skills in the Use of Drugs.	194
SALEM PUBLIC SCHOOLS, ORE.  VT 008 226 ED 030 714  An Outline for Basic Family Life Education, Grades 1 Through 12.	198	SMITH, FARMER S., ED. VT 002 100 The General Related Units for Industrial Cooperative Training; A Suggested Study of Topics Needed	212
SALSBURY, MARILYN L., COMP. VT 007 228 ED 029 95! Occupational Communication Competencies: A List of Audio- Visual Aids.  SAN DIEGO STATE COLL., CALIF.	236	by Every Vocational Student, Teachers' Guide.  SMITH, NELSON L., III VT 009 331  Basic Electronic Components: Resistors.	228
INDUSTRIAL ARTS DEPT. VT 007 853 ED 031 555 Woodworking Technology.  SAN FRANCISCO HOMEMAKER SERVICE, CALIF.	206	SOUTH CAROLINA DEPT. OF EDUCATION. OFFICE OF VOCATIONAL EDUCATION VT 008 824 Store Security (Transparency Masters).	191
VT 009 160 Home Health Aide Training Manual.  SANKOFF, LEO VT 009 308 Anatomy of the Fowl.  VT 009 309 Grading Eggs for Quality.	196 170 170	SOUTH CAROLINA STATE DEPT. OF EDUCATION, COLUMBIA. HOME ECONOMICS EDUCATION SECTION VT 008 904 Future Homemakers of America (Transparency Masters).	201
VT 009 326  How to Do a Poultry Autopsy.  VT 009 334  Poultry Selection and Judging.  SCHAEFER, CARL J.	174 176	SOUTH CAROLINA STATE DEFT. OF EDUCATION, COLUMBIA. HUMENAKING EDUCATION VT 008 905  Consumer Education (Transparency Masters).	201
Plumbing Related Course for Apprentices, Part II, Learner's Manual.  SCHOOLS COUNCIL, LONDON (ENGLAND)	212 225	SOUTH CAROLINA STATE DEPT. OF EDUCATION, COLUMBIA. OFFICE OF VOCATIONAL EDUCATION VT 008 938 Parliamentary Procedures (Transparency Masters).	192



•	PAGE	•	PAGE
PT 008 944 Distributive Education Clubs of America (Transparency Masters).  SOUTH CAROLINA STATE DEPT. OF EDUCATION, COLUMBIA. TRADE AND INDUSTRIAL EDUCATION SECTION PT 008 312 Curriculum Guide for Trades and Industries Tailoring Programs.  VT 008 724	192 218 223	TENNESSEE STATE BOARD FOR VOCATIONAL EDUCATION, NASHVILLE. DIV. OF VOCATIONAL TECHNICAL EDUCATION VT 008 192  Guide for Course of Study for Woodworking Machine Operatory (Entry).  VT 008 194  Guide for Course of Study for Electronic Nechanic (Any Ind.) (Entry).	216 217
Safety Handbook: A Guide for Trade and Industrial Education Programs. VT 008 731 Curriculum Guide for Trades and Industries Brick Masonry.  SOUTHERN ILLINOIS UNIV., EDWARDSVILLE	224	TENNESSEE STATE BOARD OF VOCATIONAL EDUCATION, MURFREESBORO. MANPOWER DEVELOPMENT TRAINING SECTION VT 008 136 Guide for Course of Study for Welder Combination.	216
VT 008 694 Consumer Education Bulletin Board Ideas.	200	TENNESSEE UNIV., KNOXVILLE. DEPT. OF AGRICULTURAL EDUCATION VT 009 390 Electrical Wiring.	178
STANISLAUS COUNTY MULTI-OCCUPATIONAL ADULT TRAINING PROJECT, MODESTO, CALIF. VT 008 910	186	TEXAS EDUCATION AGENCY, AUSTIN VT 001 686 Industrial Arts Electricity-	204
Bookkeeper II. VT 008 911 Bank Teller.	226	Electronics, Grades 7-12. Course Guide. VT 008 042 Basic Curriculum for Vocational Agriculture in Texas. Production	163
STATE UNIV. OF NEW YORK, ALBANY. BUREAU OF INDUSTRIAL ARTS EDUCATION VT 008 328 Suggested Related Information for the Metal Area. Industrial Arts Comprehensive General Shop Course. STOUT STATE UNIV., MENOMONIE, WIS. VT 009 072 ED 031 594 Developing American Industry Courses for the Secondary School.	208	Agriculture.  TEXAS EDUCATION AGENCY, AUSTIN. DEPT. OF VOCATIONAL EDUCATION VT 009 176 Coordinated Vocational-Academic Education Metal Trades Program. (Basic Metalworking, Welding, Sheet Metal Fabricating, Ornamental Ironworking).	227
STRAIT, DON VT 007 687 ED 029 953 Principles and Philosophy of Vocational Education.  SYSTEMS OPERATIONS SUPPORT, INC.,	236	TEXAS INDUSTRIAL ARTS ASSOCIATION VT 001 686 Industrial Arts Electricity- Electronics, Grades 7-12. Course Guide.	204
VT 001 950 ED 023 786  Auto Mechanics: Methodology.  Technical Instruction Manual.	212	TEXAS UNIV., AUSTIN. INSTRUCTIONAL MATERIALS LAB. VT 008 021 Communication in Distribution.	190
VT 001 961 ED 026 455 Practical Electronics. Technical Instruction Manual.	212	First-Year Basic Instruction. VT 008 245 Basic Organization of Distribution. First-Year Basic	191
TENNESSEE STATE BOARD FOR VOCATIONAL EDUCATION, NASHVILLE VT 008 193 Occupational Instructors Handbook Manpower Development Training.	236	Instruction. VT 008 989 Color Dynamics for Marketing and Distribution.	192
		THOMPSON, JOHN F. VT 007 338 Handbook for the Interns in Agricultural Education.	16.3

	PAGE		PAGE
THOMSON, W.T.		WASHINGTON RESEARCH COORDINATING	
VT 009 350	178	UNIT FOR VOCATIONAL EDUCATION,	
Pocket Gophers.		OLYMPIA	
		VT 007 228 ED 029 951	236
THRASHER, FRANK P., AND OTHERS		Occupational Communication	
VT 009 300	169	Competencies; A List of Audio-	
Exercises for Biological		Visual Aids.	
Principles in Agricultural Crops.			
TORR TOWN R		WASHINGTON STATE UNIV., PULLMAN.	
TODD, JOHN D.		AUDIO VISUAL CENTER	
VT 009 390	178	VT 007 228 ED 029 951	236
Electracal Wiring.		Occupational Communication	
MOONE WARMON D		Competencies; A List of Audio-	
TOONE, HARMON B. VT 009 318	470	Visual Aids.	
Fitting and Showing FFA Dairy Catt	172	UDDCMDD TANDO D	
riccing and Showing Pra Daily Catt	ite.	WEBSTER, JAMES P., JR.	4
TROSKEY, MARY C.		VT 009 317	172
VT 009 193	202	Use of the Level: Reading the Rod.	
Guide for Training Homemakers.	202	WESTESEN, GERALD L.	
ourde the transmit head were set be		VT 009 339	177
TUCKER, JEANNE		Introduction to Irrigation.	1//
VT 009 313	171	incroduction to Milidacion.	
Beginning Techniques in Flower	• • •	WESTON, CURTIS R., AND OTHERS	
Arranging.		VT 009 177	166
VT 009 333	175	Resource Material for Teaching	100
Flowers to Wear.		Agricultural Mechanics.	
TULSA PUBLIC SCHOOLS, OKLA.		WILLIS, JOSEPHINE C.	
VT 005 916	198	VT 008 913	186
Resource Materials for Family		Courdinator's Handbook,	
Clothing.		Cooperative Office Education.	
TULSA PUBLIC SCHOOLS, OKLA. DIV. OF		WINNER, WALTER P., ED.	
INSTRUCTION		VT 009 588	233
VT 005 914	204	Airman's Information Manual. 1969	
Instructor's Guide for Printing 1 and 2.		Special Pilot Training Edition.	
VT 005 915	201	STACEON CLUB AND DOUBLE CONTRA	
Instructor's Guide for Senior High	204	WINSTON-SALEM/FORSYTH COUNTY	
School Woodwork in the Tulsa		SCHOOLS, N.C. VT 009 194	040
Public Schools (Tentative).		Senior High School Industrial Arts.	210
rabito bonoots (lendacive).		Senior migh School industrial Arts.	•
UNION CARBIDE CORPORATION, TEXAS		WISCONSIN STATE BOARD OF VOCATIONAL,	
CITY, TEX.		TECHNICAL AND ADULT EDUCATION,	
VT 009 022	227	MADISON	
A New Craft Is Born; An		VT 002 481	198
Apprenticeship Program for		Quality Through Growth, A	. , 0
Chemical Process Operator.		Suggested Guide in Teacher	
,		Education for Home Economics	
VANSTAVERN, B.D.		Coordinators and Teachers.	
VT 009 569	180		
Appraising Market Hogs for Carcass		WISCONSIN UNIV., MADISON. DEPT. OF	
Merit.		AGRICULTURAL AND EXTENSION EDUCATION	
		VT 007 338	163
VIRGINIA STATE DEPT. OF EDUCATION,		Handbook for the Interns in	
RICHMOND. HOME ECONOMICS EDUCATION		Agricultural Education.	
SERVICE	400		
VT 008 254	199	WOLF, WILLARD H., ED.	
Home Economics Education Guide for		VT 002 937	162
Instruction Preparatory to		Agricultural Business and Services	
Entering Clothing Service Occupations.		for High School Students of	
OCCUPACTOR Se		Vocational Agriculture, 1967.	
VORHIES, RALPH			
VT 009 323	174		
Exhibiting Plant Products at the	• • •		
, . = = = = = = = = = = = = = = = = = =			



Fair.

	PAGE		PAG
VT 000 717 Plumbing Related Course for Apprentices, Part II, Learner's Manual.	212	VT 004 028 You and the Computer. A Student's Guide.	18
VT 001 577 Business Law for High Schools.	182	VT 004 033 Ornamental Horticulture, A Guide for Providing Instruction for 11th	16: h
VT 001 686 Industrial Arts Electricity-Electronics, Grades 7-12. Course Guide.	204	and 12th Grade Vocational Education Agriculture.  VT 004 772	on 21:
VT 001 950 ED 023 786 Auto Mechanics: Methodology. Technical Instruction Manual.	212	Industrial-Service Engineering Technology, Automotive Major, Evaluation Monograph.	
VT 001 961 ED 026 455 Practical Electronics. Technical	212	VT 005 237  Home Economics Evaluation Services in the Junior High School.	198 ;
Instruction Manual.  VT 002 100  The General Related Units for	212	VT 005 617 Careers Related to Industrial Education.	213
Industrial Cooperative Training: P Suggested Study of Topics Needed R Every Vocational Student, Teachers Guide.	h <b>v</b>	VT 005 914 Instructor's Guide for Printing 1 and 2.	204
VT 002 215 Ornamental Horticulture Teaching Materials.	162	VT 005 915 Instructor's Guide for Senior High School Woodwork in the Tulsa Public Schools (Tentative).	204 c
VT 002 481 Quality Through Growth, A Suggeste Guide in Teacher Education for Hom Economics Coordinators and Teachers.	198 ed le	VT 005 916 Resource Materials for Family Clothing.  VT 006 011	198 190
TO 002 693 Teacher's Manual on How to Use Ornamental Horticulture Teaching Materials.	162	Distributive EducationWholesaling. A Pilot Program at Hartford Public High School.	130
TT 002 813 Out on Your Own.	198	VT 006 188 ED 029 946 Occupations for You. Part Two.	236
T 002 937 Agricultural Business and Services for High School Students of Vocational Agriculture 1967.	162	The New Mexico State Planning Guide	182
T 002 937 Agricultural Business and Services for High School Students of Vocational Agriculture 1967.	162	for Industrial Arts.	204
T 003 533 Technical Subjects, Courses of Study.	213	Drafting I. Student Problems.	205
T 003 598 Office and Business Practices.	182	VT 006 650  General Metal Work 1 and 2. Course of Study.	205
Career Guidance Series.		VT 006 670  Business Communication.	182

	PAGE		PAGE
VT 006 739 Engine-Electrical Tune-Up System. VT 006 740	213 213	VT 007 398 Fundamentals of Delcotron Generators. Training Chart Manual. Section K.	215
A.E.A. Tune-Up System: 1968 Wiring Diagrams. Supplement to the A.E.A. Tune-Up Specification Charts.		VT 007 399 Transistor Regulators. Training Chart Manual. Section L.	216
VT 006 745 Data Processing I.	183	VT 007 400  Double Contact Regulators. Training	216
VT 006 765 Graphic Arts 1 and 2. Course of Study.	205	Chart Manual. Section R.  VT 007 687 ED 029 953  Principles and Philosophy of	236
VT 006 921 Staff Development: Motivation and Stimulation of Employees,	194	Vocational Education.  VT 007 692	183
Instructional Gutline.  VT 007 228 ED 029 951	236	IBEA Handbook for Teachers of Office Procedures.	163
Occupational Communication Competencies: A List of Audio-Visual Aids.	183	VT 007 699 ED 027 400  A Description and Source Listing of Professional Information in Agricultural Education, 1964-65, 1965-66.	
Business Information Systems; Course Outline.		VT 007 777 Training for Office Supervision.	183
VT 007 338  Handbook for the Interns in Agricultural Education.	163	VT 007 820 ED 029 955 Practical Nursing Education. A Guide for Teaching Basic Concepts and Skills in the Use of Drugs.	194
VT 007 390 Fundamentals of Electricity and Magnetism. Training Chart Manual. Section A:	214	VT 007 844 ED 031 554 Units for the Laboratory of Industries.	205
VT 007 391 Storage Batteries. Training Chart Manual. Section B.	214	VT 007 848  Hydraulic Systems for the Farm.  Resource Unit and Skill Text.	163
VT 007 392 Cranking Motors. Training Chart Manual. Section C.	214	VT 007 853 ED 031 555 Woodworking Technology.	206
VT 007 393 Ignition System. Training Chart Manual. Section D.	214	VT 007 857 ED 031 556  Laminating and Bending; A Base Syllabus on Wood Technology.	206
VT 007 394  Generators. Training Chart Manual.  Section E.	215	VT 007 858 ED 031 557 Adhesives: A Base Syllabus on Wood Technology.	206 1
VT 007 395 Standard Duty Generator Requiator. Training Chart Manual. Section F.	215	VT 007 859 ED 031 558 Lumber and Related Products; A Bas Syllabus on Wood Technology.	206 se
VT 007 396  Heavy Duty Generator Regulators.  Training Chart Manual. Section G.	215	VT 007 860 ED 031 559 Wood Substitutes; A Base Syllabus on Wood Technology.	207
VT 007 397 Fundamentals of Semiconductors. Training Chart Manual. Section J.	215	VT 007 861 ED 031 560 Wood Properties and Kinds; A Base Syllabus on Wood Technology.	207
		VT 007 956 Manual for the Nurse's Aide.	194



	PAGE		PAGE
VT 007 975 Suggested Curriculum Guide for: Secretarial.	183	VT 008 226 ED 030 714 An Outline for Basic Family Life Education, Grades 1 Through 12.	198
VT 007 976 Suggested Curriculum Guide for: Clerical.	184	VT 008 231 A Guide to Highway Safety and Driver Education.	237
VT 007 977 Suggested Curriculum Guide for: Cooperative Office.	184	VT 008 245  Basic Organization of Distribution First-Year Basic Instruction.	191
VT 007 978 Suggested Curriculum Guide for: Vocational Office Procedures.	184	VT 008 254  Home Economics Education Guide for Instruction Preparatory to Entering Clothing Service Occupations.	
VT 007 984 Tear Gas Manual.	216	VT 008 268 Safety Education in the School	207
VT 008 021 Communication in Distribution. First-Year Basic Instruction.	190	Shop.  VT 008 269 ED 026 273	207
VT 008 037 Vocational Education, A Dramatization.	236	Space Resources for the High School. Industrial Arts Resource Units.	
VT 008 042 Basic Curriculum for Vocational Agriculture in Texas. Production	163	VT 008 270 Handbook for Industrial Arts Education.	207
Agriculture. VT 008 079 ED 029 961	163	VT 008 276 Evaluation Guide for Homemaking Education.	199
Grain, Feed, Seed, and Farm Supply Technology. A Suggested 2-Year Pos High School Curriculum.		VT 008 287 Electrical Experiments. Part I: Electric Motor Control.	217
VT 008 094 Discount Retailing.	190	VT 008 288 Electrical Experiments. Part II:	217
VT 008 130 Connecticut Business Education Handbook.	184	A-C Across the Line Control. VT 008 289	217
VT 008 134 Programmed Text on Orientation to	185	Electrical Experiments. Part III: Basic Electronics.	
an Office Education Program.  VT 008 136  Guide for Course of Study for Welder Combination.	216	VT 008 290 Theory and Fundamental Process Units, Tool and Diemaking. Grade 11.	218
VT 008 191 Show Card Lettering and Layout.	190	VT 008 291 Shop Theory for Machine Trades. Metallurgy of Iron and Steel. Sessions 1-12.	218
VT 008 192 Guide for Course of Study for Woodworking Machine Operatory (Entry).	216	VT 008 312  Curriculum Guide for Trades and Industries Tailoring Programs.	218
VT 008 193 Occupational Instructors Handbook Manpower Development Training.	236	VT 008 319 Oklahoma Curriculum Guide for Driver and Traffic Safety Education.	218
VT 008 194  Guide for Course of Study for Electronic Mechanic (Any Ind.) (Entry).	217	VT 008 328 Suggested Related Information for the Metal Area. Industrial Arts Comprehensive General Shop Course.	208

Ъ	AGE	# A	NG Fi
VT 008 332 Teaching Aids for Electrical Experiments. Grade 11. Lesson Plan.	219	VT 008 536 Vocational Automotive Mechanics. A Teacher, s Outline.	220
VT 008 372 A One Week Teaching Unit on Consumer Finance. Teacher's Kit.	199	VT 008 537 Vocational Industrial Drafting. A Teacher's Outline.	208
VT 008 374 A Training Officer's Guide to Commercial Apprenticeship.	185	Blueprint Reading for Metal Trades.	220 237
000 37F	194	VT 008 555 Design of Instruction.	231
VT 008 375 A Curriculum Guide to Public Health Training for the Indian Licensed Practical Nurse.			221
VT 008 402	219		
Experiments for the Student Laboratory.		VT 008 570 Welding, Blueprint Reading for Welders.	221
VT 008 414 Guide Syllabuses of Training for Metallurgical and Chemical Technicians.	219	VT 008 577 Audio-Visual Aids Relating to the Graphic Arts.	221
VT 008 415 Recommendations for Craft Apprentice Training 1966.	219	VT 008 583 101 Case Problems in Retail Selling.	191
VT 008 454 School and Business Relationships. First-Year Basic Instruction.	191	VT 008 610 Industrial Technical Mathematics II for Plumbers.	221
VT 008 456 Economic Education Scope and Sequence Chart, 1969. A Handbook.	237	VT 008 611 Proposed Occupational Preparation Program in Metal Skills.	221
VT 008 467 Short-Term Course for Cooks in Long-Term Care Facilities. Curriculum Guide for Health	199	VT 008 613  Machine Trades: Grinding and Heat Treating.	221
Occupations.  VT 008 473 ED 029 974	200	VT 008 617 Recommendations for Training. Operatives.	222
Instructional Materials for Occupational Home Economics Food Service Area.		VT 008 623  Metallurgical Technology. A  Suggested 2-Year Post High School	222
VT 008 486 ED 031 565 Water and Wastewater Technology: A Suggested 2-Year Post High School Curriculum.	195	Curriculum.  VT 008 624  Suggested Physical Agility Program.	222
VT 008 492 ED 029 975 Home Economics Related Occupations Training Plans.	200	VT 008 625 Uniform Fire Science Curriculum.	222
VT 008 494 Automechanics Related Math. Assignment Sheets.	219	VT 008 626 Oxy-Acetylene Welding, Technical Information.	223
VT 008 527 ED 030 721 The "Project ABLE" General Woodworking Curriculum. (Interim Product).	220	VT 008 633  Monitoring of On-Job Training of Craft Apprentices in Electricity Boards Concerned with Distribution	<del>-</del>
VT 008 535 Precision Measurement.	220		



	PAGE	1	PAGE
VT 008 642 A Guide for Planning Occupational Programs in Agricultural Mechanization.	164	VT 008 838 Planning and Supervision of Stage IV Training for Craft Apprentices.	225
VT 008 646 Farm Business Management Report, 1968.	164	VT 008 839  Guide Syllabus for the Training of Administrative and Commercial Trainees.	185
VT 008 648  Job Corps Training Standard for Painter.	223	VT 008 840 Recommendations on Commercial and Clerical Training.	185
VT 008 694 Consumer Education Bulletin Board Ideas.	200	VT 008 841  Recommendations for the Training o Boilermaker, Welder and Blacksmith Apprentices.	
VT 008 724 Safety Handbook: A Guide for Trade and Industrial Education Programs. VT 008 731		VT 008 857  Recommendations for the Training of Technicians and Technologists.	2 <b>2</b> 5 <b>f</b>
Curriculum Guide for Trades and Industries Brick Masonry.	447	VT 008 870 Technology and the Schools.	225
VT 008 733 Power: Prime Mover of Technology. Laboratory Manual.	208	VT 008 872 Industrial Arts Curriculum Guide: Industrial Arts, 1968-1969.	209
VT 008 734 Power: Prime Mover of Technology. Teacher's Manual.	208	VT 008 880 Books for Training Officers.	237
VT 008 778  Teaching Aids for Home Economics;  Source List.	200 A	VT 008 885 Cooperative-Distributive Education; An Alternate Semester Program.	191 •
VT 008 791 ED 030 744  Dental Assistant Training; Standar  Course Outline.	195 d	VT 008 904 Future Homemakers of America (Transparency Masters).	201
VT 008 794 ED 030 745  Development and Evaluation of a  Curriculum of Wage Earning	201	VT 008 905 Consumer Education (Transparency Masters).	201
Occupation.  VT 008 805	2.24	VT 008 910 Bookkeeper II.	186
The Cranking Circuit (and How It Works).	224	VT 008 911 Bank Teller.	226
VT 008 806 Introducing the Delcotron Generator and the Charging Circuit.	224	VT 008 913 Coordinator's Handbook, Cooperative Office Education.	186
VT 008 807 Let's Talk Energizers and Batteries Testing and Servicing.	224 5	VT 008 915 Charging Ignition and Cranking Systems: Periodic Maintenance and Circuit Checks.	226
VT 008 808 Regulation and the Charging Circuit.	224	VT 008 923 Cooperative Office Education.	186
TT 008 809 20,000 Volts under the Hood: The Ignition Circuit and How It Works.	225	VT 008 925 An Introduction to the Art of Photoengraving.	226
TT 008 824 Store Security (Transparency Masters).	191	VT 008 931 ED 031 581  Manual for Training Leprosy Rehabilitation Workers	195



£	AGE	P.	PAGE
VT 008 938 Parliamentary Procedures (Transparency Masters).	192	VT 009 078  Consumable Supply List for Farm Mechanics and General Shop.	165
VT 008 944  Distributive Education Clubs of America (Transparency Masters).	192	VT 009 079 Suggestions for Equipping the Farm Mechanics Shop.	165
VT 008 948 Purser Pharmacist Mate Curriculum. A Training Curriculum.	195	VT 009 080  Books and Reference Material for Use in North Dakota Vocational Agriculture Departments.	165
VT 008 949 How to Grade Furs.	164	VT 009 081 A Suggested Guide for Teaching Slow	209 I
VT 008 983 Arc Welding. Materials and Material Processes Series.	226	Learners in Industrial Arts in the Public Schools.	196
VT 008 989	192	VT 009 160 Home Health Aide Training Manual.	130
Color Dynamics for Marketing and Distribution.	1,72	VT 009 172 Homemaking Guide. Section III;	201
VT 008 992 Developing Economic Concepts	186	Children.	166
through Introduction to Business.	209	VT 009 173 Swine Carcass Evaluation.	100
VT 008 993 Woodworking: Vocational-Industrial Education Curriculum Guide.	209	VT 009 174  Typewriting: A Tentative Program of Instruction.	187 E
VT 009 022 A New Craft Is Born: An Apprenticeship Program for Chemical Process Operator.	22 <b>7</b>	VT 009 175 A Study in Recruiting and Training Home and Institutional Health Aides.	196
VT 009 047 Secretarial Skills and Procedures. Adult Course Outline.	187	VT 009 176 Coordinated Vocational-Academic Education Metal Trades Program.	22 <b>7</b>
VT 009 055 Curriculum Materials Annotated Listing of Materials Available from Public Education Agencies.	238 1	(Basic Metalworking, Welding, Sheet Metal Fabricating, Ornamental Ironworking).	
VT 009 055 Curriculum Materials Annotated	238	VT 009 177 Resource Material for Teaching Agricultural Mechanics.	166
Listing of Materials Available from Public Education Agencies.		VT 009 191 Business and Office Education	187
VT 009 071 Some Vo-Aq Classroom and Laboratory Instructional Aids.	164	Handbook.	202
VT 009 072 ED 031 594 Developing American Industry Courses for the Secondary School.	209	Guide for Training Homemakers.  VT 009 194  Senior High School Industrial Arts.	210
VT 009 076  Reports of Consultants and Advisory Specialists. Volume X-A: Industrial and Practical Arts, Vocational		VT 009 195 Curriculum Guide for Ornamental Horticulture.	166
Education, and General Adult Education.		VT 009 234 An Instructional Manual for CARDIAC: A Cardboard Illustrative	238
YT 009 077 Suggested Films for North Dakota Vocational Agriculture Departments	165	Aid to Computation.	



	PAGE		PAGE
VT 009 235 Occupational Services Academic Curriculum. Mathematics Resource Book, Grade 10.	238	VT 009 297 Small Gasoline Engines, (Ornamenta Horticulture).	168 1
VT 009 236 World Cultures Resource Book: Grad	239	VT 009 298 Soils Manual for Land Judging.	168
10.		VT 009 299 Dumore Farm Records Problem.	168
VT 009 238 Occupational Services Academic Curriculum, English, Social Studies, Mathematics, Science, Grade 10.	239	VT 009 300 Exercises for Biological Principle in Agricultural Crops.	169 s
VT 009 240 Occupational Services Academic	239	VT 009 301 Tool Identification Manual.	169
Curriculum. English Resource Book, Grade 9.		VT 009 302 Shady Lane Farm Management and Records Problem.	169
VT 009 242 Occupational Services Academic Curriculum. Mathematics Resource Book, Grade 9.	239	VT 009 303 Experiments in Soil Science.	169
VT 009 249 Occupational Services Academic Curriculum. English, Social	239	VT 009 306 Applied Design. VT 009 307	<ul><li>210</li><li>170</li></ul>
Studies, Mathematics, Science, Grade 9.		The Brood Sow and Litter.	170
VT 009 268 Resource Guide, Housing and Home Furnishings.	202	Anatomy of the Powl.	170
VT 009 281	210	Grading Eggs for Quality.	170
Interpreting Industry Through Line Production.  VT 009 282	<b>16</b> 6	VT 009 310 Oxy-Acetylene Welding: Setting up the Equipment and Lighting the	170
Grounds Care: Custodial Training Course.	190	Torch.  VT 009 311  Oxy-Acetylene Welding: Flat	171
VT 009 284 Communications Via Offset Lithography.	227	Position Welds.	171
VT 009 287	167	Vegetables.	4-4
Supervision in Agriculture: A Unit of Instruction.  VT 009 289	227	VT 009 313 Beginning Techniques in Plower Arranging.	171
Job Analysis, Man Power Allotment and Work Schedules: Custodial Training Course. Resource Manual.	227	VT 009 314 ED 032 428  Developing a High School Program in Ornamental Horticulture. Volume I, Nursery Management.	171 n
VT 009 290 In-Betweens: A Curriculum Guide for Home Economics Teachers of Students with Special Learning Needs.		VT 009 315 Judging Vegetable Crops.  VT 009 317	172
VT 009 293 A Manual on Nursery Practices.	167	Use of the Level: Reading the Rod.	172
VT 009 294 Judging Deciduous Fruit Trees.	167	VT 009 318  Fitting and Showing FFA Dairy Cattle.	172
VT 009 296 Insects Identification Manual.	167		

	PAGE		PAGE
VT 009 319 CO-OPS: (Cooperative Organizations Offering Producers Services).	172	VT 009 341 Use of the Level: Setting Up the Instrument.	177
VT 009 320 Fundamentals of Equitation.	173	VT 009 342 The Poultry Industry, A Career wit a Future.	177 h
VT 009 321 Fat Lamb Project Problems.	173	VT 009 343 Handbook of Coaxial Microwave	228
VT 009 322 Evolution in Marketing Farm Products.	173	Measurements.	228
VT 009 323 Exhibiting Plant Products at the Fair.	174	Handbook of Noise Measurement.  VT 009 345  Minor Maintenance: Custodial  Training Course.	229
VT 009 324  Fitting and Showing FFA Beef.	174	VT 009 350 Pocket Gophers.	178
VT 009 325 Pre-Natal Development of the Calf.	174	VT 009 351 Ground Squirrel Control.	178
VT 009 326 How to Do a Poultry Autopsy.	174	VT 009 362 On Management Training and	229
VT 009 327 Catching and Handling Poultry.	175	Development. VT 009 363	187
VT 009 328 Commercial Beef Cattle Projects.	175	The Training of Accountants.  VT 009 364	187
VT 009 329 Embryo Development of the Chick.	175	Syllabus of Training for Accountants.	400
VT 009 330 Your Future as a Draftsman.	228	VT 009 365 The General Training of Clerical Staff.	188
VT 009 331  Basic Electronic Components: Resistors.	228	VT 009 366 The Training of Mates as Linesmen (Steel Tower Lines).	229
VT 009 333 Flowers to Wear.	175	VT 009 367 Monitoring of On-Job Training of	229
VT 009 334 Poultry Selection and Judging.	176	Craft Apprentices in Electricity Boards Concerned with Generation.	
VT 009 335 Beef Carcass Judging and Grading.	176	VT 009 368 The Training of Operatives in Electricity Boards Concerned with	229
VT 009 336 Plant Identification: Annuals, Perennials, and House Plants.	176	Distribution. VT 009 369	230
VT 009 337 Poultry Brooding Management.	176	The Training of Training Officers.  VT 009 370	230
VT 009 338 Beef Cattle, Part I, Castration.	177	On Industrial Staff Traineeships.  VT 009 371  The Training of Jointers as	230
VT 009 339 Introduction to Irrigation.	177	Jointers (Extra High Tension).  VT 009 372	230
VT 009 340 The Food Processing Industry.	177	The Training of Mates as Jointers.	2 J V



	PAGE	E	PAGE
VT 009 373 The Training of Mates as Linesmen (Wood-Pole).	230	VT 009 569 Appraising Market Hogs for Carcass Merit.	180
VT 009 374 The Training of Craft Apprentices.	231	VT 009 582 Flight Maneuvers Manual for Instructors and Students.	233
VT 009 375 The Training of Instructors.	231	VT 009 588 Airman's Information Manual. 1969	233
VT 009 376 Craft Apprentice Training Programmes for Electricians, Electrical Fitters, and Meter Mechanicians in Electricity Boards Concerned with Distribution.	231	VT 009 592 Automobile Mechanics; An Outline for Trade and Industrial Programs.	233
VT 009 377 Craft Apprentice Training	231	VT 009 610 Office Procedures Used in the Agricultural Services.	180
Programmes for Mechanical Fitters, Electrical Fitters, and Instrument Mechanics in Electricity Boards Concerned with Generation.		VT 009 615 An Introduction to the Automotive Electrical System.	233
VT 009 378  The Training of Jointers and Linesmen's Mates in Electricity Boards Concerned with Distribution	231	VT 009 616 Distributor Coil Generator Regulator: Service Tips.	234
VT 009 379 The Training of Student Engineering Apprentices.	232 q	VT 009 617 It's Easy to be an ExpertBattery Man, That Is.	
VT 009 380 The Training of Supervisors.	232	VT 009 856 ED 034 074 Microfiche Collection of Clearinghouse Documents Reported in Abstracts of Instructional	240
VT 009 390 Electrical Wiring.	178	Materials in Vocational and Technical Education (AIM), Fall 1969.	
VT 009 413  Design and Control of Concrete Mixtures.	232	VT 009 857 ED 034 075 Abstracts of Instructional Materials in Vocational and	240
VT 009 415 Concrete Technology: Instructor's Guide.	232	Technical Education (AIM), Fall 1969.	
VT 009 432 Free Teaching Materials for Adult Vocational Programs.	240		
VT 009 498 Understanding Financial Statements 7 Keys to Value.	188 ;		
VT 009 565 Supervised Occupational Experience in Agriculture: Plans and Records.	179		
VT 009 566 Weed Control, Cultural and Chemical.	179		
VT 009 567 Plows and Plowing.	179		
VT 009 568 Landscaping the Home Grounds.	179		

# CONVERSION OF DOCUMENT NUMBER INDEX $^{\!1}$

	VT NUMBERS CON	ERTED TO ED OR MP NUMBERS2
VT 001 950 VT 001 961 VT 005 713 VT 006 188 VT 007 228	ED 023 786 ED 026 455 ED 019 523 ED 029 946 ED 029 951	VT 008 079 ED 029 961 VT 008 226 ED 030 714 VT 008 234 ED 029 131 VT 008 269 ED 026 273 VT 008 311 ED 029 136
VT 007 687 VT 007 699 VT 007 820 VT 007 844 VT 007 853	ED 029 953 ED 027 400 ED 029 955 ED 031 554 ED 031 555	VT (\( \cdot
VT 007 857 VT 007 858 VT 007 859 VT 007 860 VT 007 861	ED 031 556 ED 031 557 ED 031 558 ED 031 559 ED 031 560	VT 008 791 ED 030 744  VT 008 794 ED 030 745  VT 008 931 ED 031 581  VT 009 072 ED 031 594  VT 009 314 ED 032 428
		VT 009 856 ED 034 074 VT 009 857 ED 034 075
	ED OR MP NUMBE	RS CONVERTED TO VT NUMBERS
ED 019 523 ED 023 786 ED 026 273 ED 026 455 ED 027 400	VT 005 713 VT 001 950 VT 008 269 VT 001 961 VT 007 699	ED 030 714 VT 008 226 ED 030 721 VT 008 527 ED 030 744 VT 008 791 ED 030 745 VT 008 794 ED 031 554 VT 007 844
ED 029 131 ED 029 136 ED 029 138 ED 029 946 ED 029 951	VT 008 234 VT 008 311 VT 008 333 VT 006 188 VT 007 228	ED 031 555 VT 007 853 ED 031 556 VT 007 857 ED 031 557 VT 007 858 ED 031 553 VT 007 859 ED 031 559 VT 007 860
ED 029 953 ED 029 955 ED 029 961 ED 029 974 ED 029 975	VT 007 687 VT 007 820 VT 008 079 VT 008 473 VT 008 492	ED 031 560 VT 007 861 ED 031 565 VT 008 486 ED 031 581 VT 008 931 ED 031 594 VT 009 072 ED 032 428 VT 009 314
		ED 034 074 VT 009 856 ED 034 075 VT 009 857



<sup>1</sup> This Andex is cumulated annually beginning with the Fall issue of AIM.

<sup>&</sup>lt;sup>2</sup>Any document with an MP number is available from EDRS by using the appropriate MP number.

#### ALABAMA

Trade and Industrial Education State Department of Education P.O. Box 2847 University, Alabama 35486

#### ALASKA

Division of Vocational Education State Department of Education Pouch F Juneau, Alaska 99801

#### ARIZONA

Arizona Association Future Homemakers of America 412 State Building Phoenix, Arizona 85007

#### CALIFORNIA

Administrative Services Branch Los Angeles City Schools 450 N. Grand Avenue P.O. Box 3307 Los Angeles, California 90054

Adult Division
Modesto Junior College
Modesto, California 95350

Aviation Book Company  $565\frac{1}{2}$  West Glenoaks Blvd. Glendale, California 91202

Bureau of Industrial Education California State Department of Education 721 Capitol Mall Sacramento, California 95814

California State Department of Education 721 Capitol Mall Sacramento, California 95814

Department of Applied Behavioral Sciences University of California at Davis Davis, California 95616

Fresno State College Bookstore Fresno State College Fresno, California 93726 Los Angeles City Schools Administrative Services Branch 450 North Grand Avenue P.O. Box 3307 Los Angeles, California 90054

Modesto Junior College College Avenue Modesto, California 95350

Oakland Public Schools 1025 Second Avenue Oakland, California 94606

San Francisco Home Health Service 410 Arquello Blvd. San Francisco, California 94118

Vocational Education Productions California State Polytechnic College San Luis Obispo, California 93401

#### COLORADO

Denver Public Schools 414 Fourteenth Street Denver, Colorado 80202

Denver Public Schools
Department of Business
Room 118
414 Fourteenth Street
Denver, Colorado 80202

Department of Vocational Education Agriculture Education Section Colorado State University
Fort Collins, Colorado 80521

Nursing Section Colorado State Department of Health 4210 E. 11th Avenue Denver, Colorado 80220

Office of Instructional Services Division of Elementary and Secondary Education Colorado State Department of Education Denver, Colorado 80203



A cumulative list of instructional laboratories and agencies that have printed copies of materials for sale.

#### CONNECTICUT

Curriculum Center
Bureau of Vocational-Technical
Schools
State Department of Education
Room 336, State Office Building
Hartford, Connecticut 06115

Dunlap and Associates, Inc. One Parkland Drive Darien, Connecticut 06820

#### FLORTDA

Broward County Board of Public Instruction
Box 8369
Ft. Lauderdale, Florida 33310

Department of Education Home Economics Section 450 TB and T Building Tallahassee, Florida 32304

Publication Section State Department of Education Room 271 Knott Building Tallahassee, Florida 32304

School Plant Management Section State Department of Education Tallahassee, Florida

#### **GEORGIA**

Coordinator's Office
American Association for Agricultural
Engineering and Vocational
Agriculture
Agricultural Engineering Building
Athens, Georgia 30601

Department of Home Economics Education College of Education University of Georgia Athens, Georgia

#### IDAHO

Idaho State Board for Vocational Education Business Education Division 518 Front Street Boise, Idaho 83702

#### ILLINOIS

The American Dietetic Association 620 North Michigan Avenue Chicago, Illinois 60611

American Hospital Association 840 North Lake Shore Drive Chicago, Illinois 60611

American Society of Radiologic Technologists 645 N. Michigan Avenue Chicago, Illinois 60611

Business Education Department Northern Illinois University DeKalb, Illinois 60115

Chapter Sponsor Pi Omega Pi Southern Illinois University Edwardsville, Illinois 62025

Chicago Board of Education 228 North LaSalle Street, Room 822 Chicago, Illinois 60601

Department of Business Education Turner Hall Illinois State University Normal, Illinois 61761

Department of General Engineering University of Illinois Urbana, Illinois 61801

Division of Agricultural Education University of Illinois 357 Education Building Urbana, Illinois 61803

Farm Electrification Council Box 1008
Oakbrook, Illinois 60523

Household Finance Corporation Prudential Plaza Chicago, Illinois 60601

Illinois State Chamber of Commerce 20 North Wacker Drive Chicago, Illinois 60606



Interstate Printers and Publishers, Inc. 19-27 North Jackson Street Danville, Illinois 61832

McNight and McNight Publishing Company Route 66 and Towanda Avenue Bloomington, Illinois 61701

Quaker Oats Company 345 Merchandise Mart Plaza Chicago, Illinois 60654

Vocational Agriculture Service 434 Mumford Hall University of Illinois Urbana, Illinois 61801

#### INDIANA

Division of Industrial Education Indiana State University Terre Haute, Indiana 47809

Home Economics Education State Department of Education 401 State House Indianapolis, Indiana 46204

Technical Literature Section Delco-Remy Anderson, Indiana 46011

Vocational Instructional Materials Center Industrial Education Department Indiana State University Terre Haute, Indiana 47809

Vocational Instructional Materials Laboratory School of Technology Indiana State University Terre Haute, Indiana 47809

#### KANSAS

Department of Business Kansas State Teachers College Cremer Hall Emporia, Kansas 66801

Kansas State Teachers College Emporia, Kansas 66801

The Medical Society of Sedgwick County 1102 South Hillside Wichita, Kansas 67211

Publications Service Haskell Institute Lawrence, Kansas 66044

#### KENTUCKY

Department of Agricultural Education College of Education University of Kentucky Lexington, Kentucky 40506

Jefferson County Board of Education 3332 Newburg Road P.O. Box 18325 Louisville, Kentucky 40218

State Office Building
State Department of Education
Division of Vocational Business
Education
Frankfort, Kentucky 40601

#### LOUISIANA

Agricultural Education Department Louisiana State University 204 Field House Baton Rouge, Louisiana 70803

Louisiana State Department of Education P.O. Box 44064 Baton Rouge, Louisiana 70804

Vocational Agricultural Education Department Louisiana State University Baton Rouge, Louisiana 70803

Vocational Curriculum Development and Research Center P.O. Box 657 Natchitoches, Louisiana 71457

#### MAINE

Industrial Arts Education Maine State Department of Education Education Building Augusta, Maine 04330



State Department of Education Bureau of Vocational Education Education Building Augusta, Maine 04330

#### MARYLAND

French-Bray Printing Company Candler Building Baltimore, Maryland 21202

Munsell Color Company, Inc. 2441 North Calvert Street Baltimore, Maryland 21218

U.S. Public Health Service Indian Health Service Nursing Services Branch 7915 Eastern Avenue Silver Springs, Maryland 20910

### MASSACHUSETTS

General Radio Company Baker Avenue West Concord, Massachusetts O1781

Henry L. Hanson Co., Inc. 25 Union Street Worchester, Mass. 01608

#### MICHIGAN

Automotive Electric Association 16223 Meyers Road Detroit, Michigan 48235

Detroit Diesel Engine Division General Motors Corporation Training Center 7707 W. Chicago Detroit, Michigan 48204

Michigan Industrial Education Society 14890 Penrod Avenue Detroit, Michigan 48223

State Department of Education P.O. Box 928
Lansing, Michigan 48904

University Microfilms, Inc. 300 North Zeeb Road Ann Arbor, Michigan 48106

MINNESOTA
Bulletin Room
Coffey Hall
University of Minnesota
St. Paul, Minnesota 55101

Document Section
State Department of Education
Room 140
Centennial Office Building
658 Cedar Street
St. Paul, Minnesota 55101

Restaurant-Hotel Aids, Inc. 1409 Willow Street Minneapolis, Minnesota 55403

#### MISSISSIPPI

Curriculum Laboratory
Box NU
State College, Mississippi 39762

Leflore County Schools Highway 82 West Greenwood, Mississippi 38930

#### MISSOURI

Business Services Division 601 Board of Education Building 1211 McGee Kansas City, Missouri 64106

Cardinal Ritter Institute 4532 Lindell St. Louis, Missouri 63108

Industrial Education 103 Industrial Education Building University of Missouri Columbia, Missouri 65201

The National Secretaries Association 1103 Grand Avenue Suite 410 Kansas City, Missouri 64106

Teaching Aids Fund 122 Waters Hall University of Missouri Columbia, Missouri 65202

#### MONTANA

Agricultural Education Department Montana State University Bozeman, Montana 59715

NEBRASKA

Department of Information College of Agriculture and Home Economics University of Nebraska Lincoln, Nebraska 68503

Division of Vocational Education State Department of Education 10th Floor, State Capitol P.O. Box 94727 Lincoln, Nebraska

University Extension Division University of Nebraska Lincoln, Nebraska 68508

NEW HAMPSHIRE

New Hampshire Research Coordinating
Unit for Vocational-Technical
Education
Stickney Avenue
Concord, New Hampshire

NEW JERSEY

Vocational-Technical Curriculum Laboratory Rutgers University 10 Seminary Place New Brunswick, New Jersey 08903

NEW MEXICO

Trade and Industrial Division
Department of Vocational Education
State Department of Education
139 South Castillo Street
Santa Fe, New Mexico 87501

NEW YORK

American Telephone and Telegraph Company Bell System 195 Broadway New York, New York

American Welding Society 345 E. 47th Street New York, New York 10017

Correlated and Pre-Technical Programs 480 Pacific Street
Brooklyn, New York 11217

Delmar Publishers, Inc. Mountainview Avenue Albany, New York 12205 Delta Pi Epsilon Bronx Community College 120 East 184th Street New York, New York 10468

Department of Public Information New York Stock Exchange 11 Wall Street New York, New York 10005

Educational Communications General Electric Company 570 Lexington Avenue, Room 801 New York, New York 10022

Garden State/Novo, Inc. 630 Ninth Avenue
New York, New York 10036

Heidelberg Sales and Service 73-45 Woodhaven Boulevard Glendale, New York 11227

International Society for Rehabilitation of the Disabled 701 First Avenue
New York, New York 10017

National Association for Practical Nurse Education and Service, Inc. 535 Fifth Avenue New York, New York 10017

National Council for Homemaker Services, Inc. 1740 Broadway New York, New York 10019

National League for Nursing 10 Columbus Circle New York, New York 10019

Publications Distribution Unit State Education Department Room 169, Education Building Albany, New York 12224

Publications Sales Office Board of Education of the City of New York 110 Livingston Street Brooklyn, New York 11201

Rochester City School District 13 South Fitzhugh Street Rochester, New York 14614

Sales Section British Information Service 845 Third Avenue New York, New York 10022

SIECUS Publications Office 419 Park Avenue South New York, New York 10016

#### NORTH CAROLINA

Food Service Guides
P.O. Box 709
Rocky Mount, North Carolina 27801

Vocational-Technical Division Department of Community Colleges State Board of Education 112 West Lane Street Raleigh, North Carolina 27602

Winston-Salem/Forsyth County Schools P.O. Box 2513 Winston-Salem, North Carolina

#### NORTH DAKOTA

The North Dakota State University of Agriculture and Applied Science Department of Agricultural Education Fargo, North Dakota 58102

# OHIO

Better Business Bureau of Central Ohio, Inc.
71 East State Street
Columbus, Ohio 43215

The Center for Vocational and Technical Education The Ohio State University 1900 Kenny Road Columbus, Ohio 43210

Cincinnati Public Schools 230 East Ninth Street Cincinnati, Ohio 45202

Distributive Education Materials Laboratory The Ohio State University 124 West 17th Avenue Columbus, Ohio 43210

Division of Research Ohio University Athens, Ohio 45701 ERIC Clearinghouse for Vocational and Technical Education
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

Hobart Brothers Company Hobart Square Troy, Ohio 45373

Human Engineering Institute Headquarters and Development Center 2341 Carnegie Avenue Cleveland, Ohio 44115

Ohio Division of Safety and Hygiene 700 West Third Avenue Columbus, Ohio 43212

Ohio Trade and Industrial Education Service Instructional Materials Laboratory The Ohio State University 1885 Neil Avenue Columbus, Ohio 43210

Ohio Vocational Agriculture Instructional Materials Service The Ohio State University 2120 Fyffe Road Columbus, Ohio 43210

Portland Cement Association Suite 409 601 Rockwell Avenue Cleveland, Ohio 44114

South-Western Publishing Company 5101 Madison Road Cincinnati, Ohio 45227

State Department of Education State Office Building 65 S. Front Street Columbus, Ohio 43215

## OKLAHOMA

The Fire Protection Department Oklahoma State University Stillwater, Oklahoma 74074

Tulsa Public Schools P.O. Box 45208 Tulsa, Oklahoma 74145



Tulsa Public Schools Home and Family Life Department P.O. Box 45208 Tulsa, Oklahoma 74145

#### OREGON

Curriculum Department Salem Public Schools 1309 Ferry Street, S.E. P.O. Box 87 Salem, Oregon 97308

Home Economics Education State Department of Education Public Service Building Salem, Oregon 97310

Oregon State Board of Education 942 Lancaster Drive, N.E. Salem, Oregon 97301

#### PENNSYLVANIA

Altoona Area School District 1415 Seventh Avenue Altoona, Pennsylvania 16603

Business and Office Occupations Education State Department of Public Instruction Harrisburg, Pennsylvania 17126

Department of Agricultural Education 101 Agricultural Education Building Pennsylvania State University University Park, Pennsylvania 16802

Mrs. Dorothy K. Hummel 320 Market Street Mifflinburg, Pennsylvania 17844

Pennsylvania Department of Health P.O. Box 90 Harrisburg, Pennsylvania 17120

State Department of Public Instruction Box 911 Harrisburg, Pennsylvania 17126

# SOUTH CAROLINA

Agricultural Education Department Clemson University Clemson, South Carolina 29631 State Supervisor of Agricultural Education
Rutledge Building
Office of Vocational Education
State Department of Education
Columbia, South Carolina 29201

State Supervisor of Distributive Education Rutledge Building Office of Vocational Education State Department of Education Columbia, South Carolina 29201

State Supervisor of Home Economics Rutledge Building Office of Vocational Education State Department of Education Columbia, South Carolina 29201

State Supervisor of Trade and Industrial Education
Rutledge Building
Office of Vocational Education
State Department of Education
Columbia, South Carolina 29201

# SOUTH DAKOTA

South Dakota State Department of Education Pierre, South Dakota

#### TENNESSEE

Department of Agricultural Education 308 Morgan Hall University of Tennessee Knoxville, Tennessee 37916

Manpower, Development and Training Office Tennessee State Department of Vocational Technical Education Room 205, Cordell Hull Building Nashville, Tennessee 37219

Vocational Curriculum Laboratory Box 1114 Murfreesboro, Tennessee 37130

# TEXAS

Agricultural Education Teaching
Materials Center
Texas Agricultural and Mechanical
University
College Station, Texas 77843



Dallas Independent School District 3700 Ross Avenue Dallas, Texas 75204

Industrial Education Department Division of Extension The University of Texas Austin, Texas 78712

Instructional Materials Laboratory Distributive Education Department Division of Extension The University of Texas Austin, Texas 78712

Texas Education Agency 201 East Eleventh Austin, Texas 78712

### UTAH

Utah State Board for Vocational Education 1300 University Club Building 136 East South Temple Salt Lake City, Utah 84111

#### **VIRGINIA**

Agricultural Education Service State Department of Education Richmond, Virginia 23216

The Air-Conditioning and Refrigeration Institute 1815 North Fort Myer Drive Arlington, Virginia 22209

Business Education Service State Department of Education State Office Building Richmond, Virginia 23216

Clearinghouse for Federal Scientific and Technical Education U.S. Department of Commerce 5285 Port Royal Road Springfield, Virginia 22151

Future Farmers Supply Service Alexandria, Virginia 22306

Structural Clay Products Institute 1750 Old Meadow Road McLean, Virginia 22101

#### WASHINGTON

Department of Agricultural Education Washington State University Pullman, Washington 99163

Seattle Public Schools 815 Fourth Avenue North Seattle, Washington 98109

#### WASHINGTON, D.C.

American Industrial Arts Association National Education Association 1201 Sixteenth Street, N.W. Washington, D.C. 20036

American Nursing Home Association 1346 Connecticut Avenue, N.W. Washington, D.C.

Department of Home Economics National Education Association 1201 Sixteenth Street, N.W. Washington, D.C. 20036

Educational Services Division National Consumer Finance Association 1000 16th Street, N.W. Washington, D.C. 20036

Information Clearinghouse on New Careers
National Institute for New Careers
University Research Corporation
4301 Connecticut Avenue, N.W.
Washington, D.C. 20015

International Association of Chiefs of Police 1319 18th Street, N.W. Washington, D.C. 20036

National Aeronautics and Space Administration Washington, D.C. 20546

Robert J. Brady Company 1300 Que Street, N.E. Washington, D.C. 20002

Small Business Administration 1441 L Street, N.W., Room 100 Washington, D.C. 20416

Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402

U.S. Bureau of Prisons Education Department 101 Indiana Avenue, N.W. Washington, D.C. 20537

## WEST VIRGINIA

Vocational Industrial Curriculum Department Capitol Building Charleston, West Virginia 25305

#### WISCONSIN

American Industry Project Stout State University Menomonie, Wisconsin 54751

North Central Technical Institute P.O. Box 750 River Drive Wausau, Wisconsin 54401

#### CANADA

Information Division Canada Department of Agriculture Ottawa, Ontario

#### **ENGLAND**

British Association for Commercial and Industrial Education 26a Buckingham Palace Road London, W.S. 1, England

Electricity Supply Industry Training Board 30 Millbank London, W.S. 1, England

Publications Officer Ceramics, Glass and Mineral Products Industry Training Board Bovis House, Northolt Road Harrow, Middlesex, England



# PUBLICATIONS OF THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION

### RESEARCH SERIES

RESEAR	CH SERIES		777.74
no.	name of publication	cost	ERIC system*
1	A National Survey of Vocational Education Programs for Students with Special Needs. April 1967. 89 + 14 p.	o	ED 011 041 Aug. '67 RIE
2	The Demand for and Selected Sources of Teachers in Vocational and Technical Education:, State Director Survey. January 1967. 31 + 51 p.	o	ED 012 331 Dec. '67 RIE
3	Research and Development Priorities in Technical Education. May 1967, A Report of a National Research Planning Conference in Technical Education, January 10-11, 1967. 34 p.	0	ED 013 888 Mar. 168 RIE
4	Review and Synthesis of Research in Agricultural Education. August 1966. 140 p.	1.50	ED 011 562 Oct. '67 RIE
5	Review and Synthesis of Research in Business and Office Occupations Education. August 1966. 128 p.	o	ED 011 566 Oct. '67 RIE
6	Review and Synthesis of Research in Distributive Education. August 1966. 212 p.	o	ED 011 565 Oct. '67 RIE
7	Review and Synthesis of Research in Home Economics Education. August 1966. 104 p.	0	ED 011 563 Oct. '67 RIE
8	Review and Synthesis of Research in Industrial Arts Education. August 1966. 88 p.	0	ED 011 564 Oct. '67 RIE
9	Review and Synthesis of Research in Technical Education. August 1966.	1.50	ED 011 559 Oct. '67 RIE
10	Review and Synthesis of Research in Trade and Industrial Education. August 1966. 76 p.	o	ED 011 560 Oct. '67 RIE
11	The Emerging Role of State Education Departments with Specific Implications for Divisions of Vocational-Technical Education. (National Conference on State Dept. Leadership in Vocational Education, February 27-March 2, 1967) 1967. 395 p.	o	ED 016 870 July '68 RIE
12	A Taxonomy of Office Activities for Business and Office Education. July 1968. 163 p.	2.75	ED OR1 140 Dec. '68 RIE
13	Enlisted Men Separating from the Military Service as a Potential Source of Teachers for Vocational and Technical Schools. October 1967. 53 p.	×	ED 016 131 June '68 RIE
14	Boost: Business and Office Education Student Training; Preliminary Report. 1967. 251 p.	3.00	ED 018 663 Sept. '68 RIE
15	Professional Personnel in State Divisions of Vocational Education: Policies, Practices, Requirements. November 1968. 99 p.	3.25	ED 023 928 Mar. '69 RIE
16	Review and Synthesis of Research on the Economics of Vocational Education. November 1968. 53 p.	1.50	ED 023 937 Mar. '69 RIE
17	Trade and Industrial Teacher Education and Certification: Report of a National Invitational Research Development Seminar. November 1968.	o	ED 025 644 May '69 RIE
18	Research Priorities in Technical Teacher Education: A Planning Model. October 1967. 48 p.	o	ED 016 815 July '68 RIE
19	Implications of Women's Work Patterns for Program Development in Vocational and Technical Education. October 1967. 70 p.	2.00	ED 016 812 July '68 RIE
20	Problems in the Transition from High School to Work as Perceived by Vocational Educators. October 1967. 76 p.	o	ED 016 811 July '68 RIE
21	An Evaluation of the Off-Farm Agricultural Occupations Materials. October 1967. 74 p.	×	ED 016 853 July '68 RIE
22	A Guide to Systematic Planning for Vocational and Technical Schools. December 1968. 23 p.	1.50	ED 026 537 June '69 RIE
23	A Guide for Flanning Facilities for Home Economics Occupational Preparation Programs. July 1968. 83 p.	2.00	ED 022 924 Feb. '69 RIE
24	A Guide for Flanning Facilities for Occupational Preparation Programs in the Machine Trades. July 1968. 71 p.	2.00	ED 023 926 Mar. '69 RIE
25	A Guide for Planning Facilities for Occupational Preparation Programs in Data Processing. November 1968. 67 p.	2.00	ED 023 927 Mar. °69 RIE
26	A Guide for Flanning Facilities for Occupational Preparation Programs in Business and Office Occupations. November 1968. 86 p.	2.00	ED 027 401 July '69 RIE
27	A Guide for Flanning Facilities for Occupational Preparation Programs in Laboratory Animal Science Technology. January 1969. 118 p.	o	ED 027 434 July '69 RIE
28	A Guide for Planning Facilities for Occupational Preparation Programs in Metallurgy Technology. March 1969. 98 p. + 10 p.	2.00	ED 027 420 July '69 RIE
29	A Guide for Planning Facilities for Occupational Preparation Programs in Automotive Service. April 1969. 86 p.	2.00	ED 028 280 Aug. '69 RIE

# PUBLICATIONS (CONT.)

no.	name of publication	cost	ERIC system#
30	A Guide for Planning Facilities for Occupational Preparation Programs in Electrical Technology. April 1969. 108 p.	2,00	ED 028 278 Aug. '69 RIE
31	A Guide for Planning Facilities for Occupational Preparation Programs for Medical X-Ray Technicians. April 1969. 58 p.	0	ED 028 283 Aug. '69 RIE
32	A Guide for Planning Facilities for Occupational Preparation Programs for Medical Assistants.	2.00	ED 029 117 Sept. '69 RIE
33	A Guide for Planning Facilities for Occupational Preparation Programs for Medical Secretaries. April 1969. 58 p.	2.00	ED 029 120 Sept. '69 RIE
34	A Guide for Planning Facilities for Occupational Preparation Programs for Dental Laboratory Technicians. May 1969. 61 p.	2.00	ED 029 127 Sept. '69 RIE
35	A Guide for Planning Facilities for Occupational Preparation Programs for Dental Assistants. May 1969. 67 p.	2.00	ED 029 965 Oct. '69 RIE
36	Vocational Guidance in Secondary Education: Results of a National Survey. December 1968. 176 p.	2.75	ED 026 534 June 169 RIE
37	A Guide for Planning Facilities for Occupational Preparation Programs for Dental Hygienists. May 1969. 67 p.	2.00	ED 029 966 Oct. '69 RIE
38	A General Guide for Planning Facilities for Occupational Preparation Programs. June 1969. 85 p.	2.00	ED 030 771 Nov. º69 RIE
39	Review and Synthesis of Research in Health Occupations Education. May 1969. 91 p.	2.75	ED 029 982 Oct. '69 RIE
40	The Identification of Opinion Leaders Among Teachers of Vocational Agriculture. June 1969. 78 p.	2.00	ED 030 764 Nov. '69 RIE
41	Vocational Development of Disadvantaged Junior High School Students. August 1969. 91 p.	2.00	ED 032 427 Jan. '70 RIE
42	Review and Synthesis of Research in Industrial Arts Education. October 1969. 69 p.	3•55	VT 010 109 April '70 RIE
43	Review and Synthesis of Research in Trade and Industrial Education, Second Edition. September 1969. 56 p.	2.25	VT 010 304 June '70 RIE
44	Changing the Response of Vocational Students to Supervision. September 1969. 44 p.	1.50	ED 032 430 Jan. '70 RIE
45	A System for State Evaluation of Vocational Education. August 1969.	2.00	ED 032 436 Jan. '70 RIE
46	Review and Synthesis of Research: Analysis for Curriculum Development in Vocational Education. October 1969. 82 p.	1.75	VT 010 138 May '70 RIE
47	Review and Synthesis of Research in Technical Education, Second Edition. October 1969. 50 p.	2.25	VT 010 306 June °70 RIE
LEADERS	HIP SERIES		
	Report of a National Vocational Education Seminar on the Administration of Research. May 24 to 27, 1965. 1965.	×	ED 011 546 Oct. '67 RIE
ı	Report of a National Seminar of Agricultural Education, "Program Development and Research." August 9-13, 1965. 176 p.	×	ED 011 036 Aug. '67 FIE
2	Guidance in Vocational Education: Guidelines for Research and Practice. A Report of a National Interdisciplinary Seminar, January 12-14, 1966, held at the Ohio State University, Columbus, Ohio. 1966. 181 p.	o	ED 011 922 Nov. '67 RIE
3	Guidelines for State Supervisors of Office Occupations Education. Report of a National Clinic, May 24-27, 1965, Pick-Fort Hayes Hotel, Columbus, Ohio. 1965. 84 p.	0	v½ 001 266
4	National Vocational-Technical Education Seminar on the Development and Coordination of Research by State Research Coordinating Units. 1966. 72 p.	o	ED 011 042 Aug. '67 RIE
5	A Report of the Business and Office Education Research Planning Conference. The Proceedings, Synthesis, Recommended Research Projects, and Papers. 1966. 116 p.	0	ED 013 304 Feb. '68 RIE
6	Program Development for Occupational Education: A Report of a National Seminar for Leaders in Home Economics Education, March 28-31, 1966. 1966. 118 p.	0	ED 011 040 Aug. '67 RIE
7	Report of a National Invitational Research Flanning Conference on Trade and Industrial Teacher Education, May 23-27, 1966. 1966. 197 p.	2.00	ED 011 043 Aug. '67 RIE
8	Report of a National Seminar, "Evaluation and Program Planning in Agricultural Education," June 27-30, 1966. 1966. 129 p.	0	ED 011 037 Aug. '67 RIE
9	Health Occupations Education Centers: Report of a National Seminar held July 11-14, 1966. 1967. 156 p.	0	ED 016 823 July °68 RIE
10	Guidelines for Cooperative Education and Selected Materials from the National Seminar held August 1-5, 1966. A Manual for the Further Development of Cooperative Education. 1967. 255 p.	0	ED 011 044 Aug. '67 RIE



# PUBLICATIONS (CONT.)

no.	name of publication	cost	ERIC %ystem*
11	Systems under Development for Vocational Guidance. A Report of a Research Exchange Conference, Chio State University, August 18 and 19, 1966. 1966. 60 p.	o	ED 011 039 Aug. '67 RIE
12	Compilation of Technical Education Instructional Materials Supplement I. New and Revised Information Resources. (National Leadership Development Institute in Technical Education, Summer, 1966) April 1967. 203 p.	3.00	ED 012 340 Dec. '67 RIE
13	Compilation of Technical Education Instructional Materials Supplement II. Institute Presentations. (National Leadership Development Institutes in Technical Education, Summer 1966) April 1967. 242 p.	3.50	ED 011 933 Nov. '67 RIE
14	Educational Media in Vocational and Technical Education: A Report of a National Seminar. 1967. 240 p.	o	ED 017 730 Aug. °68 RIE
15	Vocational-Technical Teacher Education: National Seminar Proceedings. (September 24-29, 1967) 1968. 283 p.	3.25	ED 020 431 Nov. '68 RIE
16	National Program Development Institutes in Technical Education, Summer 1967: A Compilation of Selected Presentations and Instructional Materials. 194 p.	o	ED 021 069 Dec. "68 RIE
17	Proceedings of Annual National Vocational-Technical Teacher Education Seminar. (2nd, Chicago, October 21-24, 1968) January 1969. 188 p.	3.00	ED 027 424 July '69 RIE
18	Program, Planning, Budgeting Systems for Educators. Volume I: An Instructional Outline. 1969. 279 p.	4.00	ED 032 417 Jan. '70 RIE
19	Program, Planning, Budgeting Systems for Educators. Volume II: A Case Problem. August 1969. 165 p.	3.50	ED 032 418 Jan. '70 RIE
20	National Conference on Research in Industrial Arts. April 1969.	×	ED 029 986 Oct. '69 RIE
21	Manpower Information for Vocational Education Flanning. Final Report. November 1969. 175 p.	3•50	VT 009 578 May '70 RIE
22	A Plan for Research in Distributive Education, Report of a Research Planning Seminar. Final Report. November 1969. 76 p.	2.50	VT 009 805 May '70 RIE
23	Second National Leadership Development Seminar for State Directors of Vocational Education. Final Report. November 1969. 134 p.	3•50	VT 009 842 May °70 RIE
BIBLIO	GRAPHY SERIES		
1	Implications of Women's Work Patterns for Vocational and Technical Education: An Annotated Bibliography. 1967. 25 p.	1.50	ED 016 812 July '68 RIE
2	Worker Adjustment: Youth in Transition from School to Work; An Annotated Bibliography of Recent Literature, 1968. 135 p.	3 <b>.2</b> 5	ED 021 070 Dec. '68 RIE
3	Program, Planning, Budgeting Systems for Educators. Volume III: An Annotated Bibliography. Final Report. August 1969. 57 p.	2.25	VT 010 164 May '70 RIE
OFF-I	FARM AGRICULTURAL OCCUPATIONS		
	Instructional Materials in:		
	Agricultural Chemicals Technology (Course outline and eight modules)	6.75	ED 013 894- 013 902 Mar. '68 RIE
	Agricultural Machinery Service Occupations (Course Outline and sixteen modules)	7.50	ED 012 761- 012 777 Jan. '68 RIE
	Agricultural Supply Sales and Service Occupations (Course outline and twelve modules)	7.00	ED 015 232- 015 241 May '68 RIE
	Horticulture Service Occupations (Course outline and twolve modules)	0	ED 013 290- 013 302 Feb. '68 RIE
	Occupational Guidance for Off-Farm Agriculture.	.60	ED 011 030 Aug. '67 RIE
	Organizing to Provide Agricultural Education for Off-Farm Occupations.	o	ED 011 032 Aug. '67 RIB
	Planning and Conducting Cooperative Occupational Experience in Off-Farm Agriculture.	1.35	ED 011 035 Aug. º67 RIE
	Policy and Administrative Decisions in Introducing Vocational and Technical Education in Agriculture for Off-Farm Occupations.	-75	ED 011 033 Aug. '67 RIE



# PUBLICATIONS (CONT.)

no.	name of publication	cost	ERIC system*
	Summary of Research Findings in Off-Farm Agriculture Occupations.	0	ED 015 245 May '68 RIE
	Vocational and Technical Education in Agriculture for Off-Farm Occupations.	<b>.</b> 75	ED 011 034 Aug. '67 RIE
INFORMA	TION SERIES		
	Abstracts of Research and Related Materials in Vocational and Technical Education. Quarterly. \$9.00 per year.	Fall 1967	ED 013 336 Feb. '68 RIE
		Winter 1967	ED 015 335 May '68 RIE
		Spring 1968	ed 016 875 July '68 RIE
		Summer 1968	ED 019 525 Oct. '68 RIE
		Fall 1968	ED 022 970 Feb. '69 RIE
		Winter 1968	ED 027 437 July '69 RIE
		Spring 1969	ED 030 000 Oct. '69 RIE
		Summer 1969	ED 031 586 Dec. '69 RIE
		Fall 1969	ED 033 247 Feb. '70 RIE
	•	Winter 1969	VT 010 430 June '70 RIE
	Abstracts of Instructional Materials in Vocational and Technical Education. Quarterly. \$9.00 per year.	Fall 1967	ED 013 337 Feb. '68 RIE
		Winter 1967	ED 015 336 May '68 RIE
		Spring 1968	ED 017 745 Aug. º68 RIE
		Summer 1968	ND 020 441 Dec. '68 RIE
		Fall 1968	ED 023 936 Mar. '65 RIE
		Winter 1968	ED 028 302
		Spring 1969	Aug. '69 RIE ED 030 769 Nov. '69 RIE
		Summer 1969	ED 032 434 Jan. '70 RIE
		Fall 1969	ED 034 075 Mar. '70 RIE
	AIM - ARM Annual Index, 1967 - 68, available to subscribers with subscriptions current as of Summer, 1968.		ED 022 064 Feb. '69 RIE
	AIM-ARM Annual Index 1968-69, available to subscribers with subscriptions current as of Summer 1968		VT 010 427 June '70 RIE
	Rotated Display of Descriptors Used by the ERIC Clearinghouse on Vocational and Technical Education. First Edition. 1967. 35 p.	1.50	

### KEY

- x Limited number of complimentary copies available. Address orders to: Dissemination Specialist, The Center for Vocational and Technical Education, The Ohio State University, 1900 Kenny Road, Columbus, Ohio 43210.
- o Out-of-print, available only through the ERIC system (see \*)
- \* Documents which show an ED number and issue of Research in Education (RIE) are available on microfiche or facsimile copy through ERIC Document Reproduction Service (EDRS). Ordering information is obtained from the appropriate issue of RIE.

Documents shown with a VT number are being processed for introduction into the ERIC system and will be available on microfiche and facsimile copy when announced in the issue of Research in Education (RIE) shown with the VT number. Ordering information can be obtained from that issue of RIE. In cases where the "Center Cost" is indicated as well as the ED number in the "ERIC System," those particular documents are also available from the Center.



Research in Education is published 12 times a year. The first issue was no. 1, November 1966. Subscription: Domestic \$21.00 a year; foreign, \$5.25 additional. Single copy: Domestic, \$1.75. Send check or money order (no stamps) to the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402